RSP

RiverOak Strategic Partners

Applicant's Answers to First Written Questions

TR020002/D3/FWQ

Examination Document

Project Name:	**Manston Airport Development Consent Order**
Application Ref:	**TR020002**
Submission Deadline:	**3**
Date:	**15 February 2019**

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

RIVEROAK STRATEGIC PARTNERS

MANSTON AIRPORT DCO

PLANNING INSPECTORATE REFERENCE: TR020002

Document reference: TR020002/D3/FWQ

Applicant's Responses to the Examining Authority's First Written Questions

submitted for Examination Deadline 3

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15 February 2019

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Ref No.	Respondent	Question
G.1 General and Cross-topic questions (including relevant planning policy)		
G.1.1	Thanet District Council (TDC)	**Saved Policies of the Thanet Local Plan 2006** Saved Policies EC2, EC3, EC4, EC5 and EC6 of the adopted Thanet Local Plan 2006 are all of particular relevance to the application. **Explain if the application fully accords with these policies and what weight should be afforded to them.**
		Applicant's Response: N/A
G.1.2	NOT USED	NOT USED
G.1.3	The Applicant	**Thanet Local Plan** TDC's Draft Local Plan to 2031 (dated 26 October 2018) allocates and safeguards land at Manston Business Park for B1, B2 and B8 uses. **Would the proposed allocation have any effect on the need for the Northern Grass Area that the application proposes for B1 and B8 uses?**
		Applicant's Response:

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		No, it would not. Annex 4 of the Updated NSIP Justification Document (January 2019) (TR020002/D1/2.3) explains why the Northern Grass land is required to support the nationally significant infrastructure project. The proposed allocation of Manston Business Park, some 2 miles from the proposed airport does not affect the need for the Northern Grass for airport related development for the reasons summarised below: (a) Land Availability at Manston Business Park – the 75.2ha allocated site is already approximately half-developed and there is some infrastructure in place, see paragraph 5.39 of the Thanet District Council (TDC) 'Economic Development in Thanet (Employment Land Update and Economic Needs Assessment) Report' July 2018 (see Appendix G.1.3 Part A at TR020002/D3/FWQ/Appendices). There is also planning permission for a development of 46 industrial units and 4 office units on the opposite side of Columbus Avenue (TDC application reference F/TH/16/1744 amended by F/TH/17/1039) comprising a site area of 1.3ha and 5,312sqm. A condition of this consent is that development needs to begin by 16th June 2020. Other extant planning permissions at Manston Business Park as at 8 January 2019 amount to 80 units and 13,393sqm of B1/B2/B8 (see page 5 of the TDC letter to Inspectors Matthew Birkinshaw and Victoria Lucas in connection with the Thanet Local Plan Examination dated 11th January 2019, also appended at Appendix G.1.3, as Part B). Approximately 42 hectares remains undeveloped although there have been a number of recent developments following slow take up of the site, see paragraph 6.2 of Appendix G.1.3 Part . The site area proposed at the Northern Grass is for 105,100m² of airport-related B1, B2 and B8 uses plus the balancing ponds (which are part of the airport-wide drainage strategy and not simply to serve the Northern Grass development) and safeguarded museum area which collectively requires approximately 50ha of land which is in excess of what is available at Manston Business Park. (b) China Gateway International Limited (CGIL) development proposals for Manston Business Park – CGIL are the owners of the Manston Business Park. They have their own aspirations for promoting development at the site and their proposals are not for airport-related development. This is evidenced by CGIL's representations to the draft Thanet Local Plan in which they indicate that they are promoting a site at Manston Business Park which is larger than what is allocated for an employment site in the draft Thanet Local Plan for a mixed-use development comprising B1, B2 and B8 employment uses but with residential uses on land to the east of Manston Business Park to help support inward investment and intensification of the Manston Business Park for employment uses. CGIL has prepared an illustrative Masterplan which has been submitted with their representations to the draft new Thanet Local Plan (see Appendix G.1.3 Part C).

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		(c) History of Manston Business Park in the Thanet Local Plan - the allocation at the Manston Business Park as an employment site for B1, B2 and B8 uses has been a longstanding allocation in the Thanet Local Plan. Paragraph 2.34 of the adopted Thanet Local Plan 2006 states that it was allocated as an employment site for development in the Isle of Thanet Local Plan (April 1998) and was carried forward into the 2006 Plan. It is now carried into the draft new Thanet Local Plan to 2031. It has therefore featured as an employment site over some 30 years of local spatial planning in Thanet but without any serious uptake until recently despite it having *"a unique relationship with the airport"* (paragraph 2.35 of the adopted 2006 Thanet Local Plan). The Manston Business Park was never envisaged as an allocation within the Local Plan which could accommodate employment uses directly associated with the airport. It was, and still is, considered to be the flagship inward investment site for the district providing potential development opportunities for growing existing businesses in the district to relocate (see paragraphs 5.8 and 5.39 of the insert document reference) - acknowledging always that the airport was close by. (d) Airport Operations – with reference to reasons set out in Annex 4 in the Updated NSIP Justification Document (January 2019) (see TR020002/D1/2.3), the Northern Grass has been geographically, functionally and legally part of Manston Airport throughout its operational history and the dDCO proposes to keep this land within the airport boundary where it is already included and where saved policies in the adopted Thanet Local Plan 2006 apply and specifically protect the land for airport-related uses. The Northern Grass fronts the B2050 Manston Road which provides direct access onto the operational airfield and associated cargo sheds. Not only is this locationally advantageous but it is synonymous with the history of the airfield. The Northern Grass was an integral part of the old RAF airfield that only became separated in 2000 when the operational boundary fence was constructed in its current position (on the south side of the B2050 Manston Road). Post privatisation, the control tower and associated buildings and car parking on the Northern Grass site continued to be used as management offices (and for associated equipment storage) by Wiggins and subsequently both Plane Station and then Infratil, during their ownership of the airfield. The navigational aids located there also remained in use and aircraft were parked and dismantled on the site even though it was by then outside the airport's operational boundary fence. Consequently, the Northern Grass remained functionally part of RAF Manston and then Kent International airport throughout its operational history. Saved policies in the adopted TDC Local Plan (2006) namely Policies EC2 and EC4 recognise the functional connection between

Ref No.	Respondent	Question
		the Northern Grass and the remainder of the airport land by safeguarding the Northern Grass land within the airport boundary and reserving it for airside development and development proposals that require an airside location. The RSP Masterplan seeks to reintroduce this functional connection. The airport is proposed to be used more intensively and this brings a need for more airside infrastructure in the form of taxiways, apron and cargo handling facilities alongside a new and enlarged passenger terminal, business aviation facilities and aircraft hangarage. The result is a greater density of airside development and therefore an increased need to displace uses that do not require an airside location, to the primary landside enclave within the airport's land boundaries – namely the Northern Grass. This airside/landside distinction is very important in terms of airport licensing and zoning, as security clearance and training is needed for buildings within or offering direct access to the airside area. This is costly and inflexible to operate within the airport boundary and therefore only those activities and personnel who need to be airside tend to be located there; all other activities that support the operational and commercial functioning of the airports tend to gravitate to landside locations as close as reasonably practicable to the airport and its operational area. The Northern Grass is ideal for this purpose especially given that historically, it was used for airside and airside-related uses and continues to be safeguarded in land use planning terms for this exact purpose. Annex 4 of the updated NSIP Justification Document (January 2019) (see TR020002/D1/2.3) lists the types of operations and facilities that are anticipated in the Northern Grass area. These include radar facilities, airport management offices that offer visibility over the airfield, offices and crew facilities for airlines, vehicle depots and storage facilities for air cargo handlers and associated logistics companies and offsite offices for Border Force Police. These are not activities that could sensibly be located at a substantial distance from the airport as this would undermine their ability to serve the operational and commercial support functions that the airport needs.
G.1.4	TDC	**Thanet Local Plan** TDC's Draft Local Plan to 2031 (dated 26 October 2018) states at paragraph 1.43, with reference to Manston Airport that:

Ref No.	Respondent	Question
		"...the site has an existing use for aviation, subject to other relevant legislation." **Explain the inclusion of the phrase "*subject to other relevant legislation".*** Applicant's Response: N/A
G.1.5	TDC	**Thanet Local Plan** TDC's Draft Local Plan to 2031 (dated 26 October 2018) states at paragraph 1.44 that: "*If a DCO for aviation use at the site is granted, this would require a partial review of the Local Plan in relation to housing land supply provisions, aviation and environmental policies and other related matters.*" **Explain the effect that the consenting of the DCO would have on the draft Local Plan's housing land supply and why a partial review would be required in this regard.** Applicant's Response: N/A
G.1.6	The Applicant TDC	**Thanet Local Plan** TDC's Draft Local Plan to 2031 (dated 26 October 2018) allocates a site called Manston Green for 785 dwellings, which it states has planning permission. Some of the site falls within the DCO application boundary.

Ref No.	Respondent	Question
		Explain the effect that the consenting of the DCO would have on the delivery of the site.
		Applicant's Response: The DCO proposals will not prevent delivery of the Manston Green housing development provided the development can comply with the safeguarding conditions that were attached to the outline planning permission to protect future residents in the event that aviation uses resumed at the airport. The decision to grant outline planning permission for the Manston Green development was taken in full recognition that Manston Airport could become operational again. Outline planning permission including access (TDC reference OL/TH/14/0050 – see Appendix OP.1.10 in TR020002/D3/FWQ/Appendices) was granted for up to 785 dwellings, highways infrastructure works (including single carriageway link road), primary school, small scale retail unit, community hall, public open space on land to the east and west of Haine Road, Ramsgate. That permission was granted consent on 13 July 2016, after the airport closed in May 2014. In accordance with Condition 2 as listed on the planning permission, any application for the approval of reserved matters for the first phase of the development needs to be made in writing to the Local Planning Authority before the expiration of 3 years from the date of the permission i.e. 13 July 2019. Any application for approval of the reserved matters for any remaining phases needs to be made to the Local Planning Authority before the expiration of 5 years from the date of this permission i.e. 13 July 2021. To date, no application for the approval of reserved matters has been submitted to TDC. If this remains the case as at 13 July 2019, the site will no longer benefit from planning permission. The application site boundary for OL/TH/14/0050 does include land which is also included within the DCO Order Limits – but for the acquisition of permanent rights over land not the permanent acquisition of land (see drawing no. NK01847-WSP-MSE-01-DR-C-2104 in APP-016). This is land needed for the approach lights in the dDCO which is the exact land which previously accommodated the landing lights when the airport was operational. The decision to grant outline planning permission for OL/TH/14/0050 was taken in full recognition that Manston Airport could become operational again. Consequently, the permission was granted subject to several 'safeguarding' conditions to protect the future residents in the event that aviation uses resumed at the airport. This included, for example, Condition 35 which

Ref No.	Respondent	Question
		prevented certain phases of development from commencing until a scheme for protecting the development from aircraft noise has been submitted to the Local Planning Authority. Condition 36 prevented any dwellings from being built in the Noise Category C area as set out in Policy EP7 of the Thanet Local Plan 2006. Condition 5 of OL/TH/14/0050 requires any reserved matters application submitted pursuant to the outline application to accord with the principles and parameters of the approved parameter plans including Parameter Plan 011 – Land Use and Amount. This plan shows an area of the application site which has been excluded from the developable area so that "*the existing airport landing lights could be retained*." It is within this area that the land included within the DCO Order Limits falls. Consequently, if any reserved matters application is submitted for Phase One before the 13 July 2019 deadline, it would need to show no development in the area where the landing lights are proposed in the dDCO. Consenting the DCO would therefore not prevent the delivery of the housing scheme. Further work would need to be carried out to demonstrate that the Manston Green scheme could meet the Masterplan requirements which include a need for the scheme to be informed by predicted aircraft noise and the alignment of the runway and the operational needs of the airport. The environmental effects that the DCO would have on the Manston Green Development are reported in the individual chapters and the cumulative effects assessment contained in the ES (APP-033 – APP-035) for the DCO. Whilst significant effects are predicted, the consent for Manston Green stipulates that provision must be made for the protection of residents in the event that the airport is reopened. As such it will be necessary for the promoters of Manston Green to ensure that appropriate mitigation is included in the detailed design of the development to ensure that effects such as noise are adequately addressed. It is assumed that the promoter for the Manston Green development and the local authority is aware of the likely reopening of the airport and as such, any such mitigation is deliverable and would not have a detrimental effect on the viability of the Manston Green development. The Applicant is willing to discuss the data and findings of the DCO Environmental Impact Assessment with the promoters of Manston Green in order that any mitigation required as a result of the airport reopening is properly implemented.
G.1.7	The Applicant	**Thanet Local Plan**

Ref No.	Respondent	Question
	TDC	TDC's Draft Local Plan to 2031 (dated 26 October 2018) allocates several housing sites in close proximity to the application site. **What effect does this have on the application and what weight can be afforded to the proposed allocations at this time?**
		Applicant's Response: Allocated housing sites closest to the application site have been assessed in the Applicant's cumulative effects assessment. Paragraph 48 of the NPPF advises that in determining applications, weight to relevant policies in emerging plans may be given according (i) to the stage of preparation of the emerging plan with the more advanced its preparation, the greater the weight that may be given, (ii) the extent to which there are unresolved objections (the less the significant the unresolved objections, the greater the weight that may be given) and (iii), the degree of consistency with the NPPF (the closer the policies in the emerging local plan to the NPPF, the greater the weight that may be given). The Draft Thanet Local Plan to 2031 is expected to be considered at Examination in April/May 2019. Limited weight can be afforded to the policies contained with the Draft Local Plan, including housing site policies, as they have not yet been formally examined by Inspectors. There remains significant unresolved objections to the policies including to the approach taken on the Manston Airport site, in addition to those policies that relate to the Council's proposed housing strategy, the strategic housing allocations and other housing sites. Representations have been submitted raising questions about the Council's evidence base. Paragraph 48(b) of the NPPF suggest that the weight accorded to the emerging policy should be tempered by the existence of unresolved objections. The Applicant along with others has questioned the degree of consistency of certain policies in the emerging plan to the NPPF. Again, paragraph 48(c) of the NPPF suggests that in this scenario, less weight may be given to policies in the emerging plan. Overall it is considered that limited weight can be afforded to the emerging policies in the draft Thanet Local Plan. Irrespective of the outcome of the Local Plan examination, the draft Thanet Local Plan to 2031 fully recognises in paragraphs 1.44 and 1.45 that if the DCO is granted, that this would require a partial review of the Local Plan in relation to housing land supply provisions, aviation and environmental policies and other related matters. The Applicant and others including Dover District Council have made representations to the draft Thanet Local Plan in connection with housing land supply within Thanet and the significant surplus employment land that exists which could be given over to housing. The Employment Land Update and Economic

Ref No.	Respondent	Question
		Needs Assessment (July 2018) (Appendix G.1.3 Part A in TR020002/D3/FWQ/Appendices)) recommends making provision for around 15 hectares of employment land (gross). In contrast, the draft Local Plan allocates some 53.5 hectares of land. The TDC Strategic Housing Land Availability Assessment (SHLAA) Review July 2018 (G.1.7 in TR020002/D3/FWQ/Appendices) indicates that potential supply is sufficient to meet the target housing requirement across the Plan period and Table 4 in the same document demonstrates that Thanet has a rolling 5 year (2018-23) supply of housing land that is available, sustainable and achievable. This demonstrates that in the event of a future partial review of the Local Plan in relation to housing land supply provisions as a consequence of the Manston Airport DCO being granted, that there is no shortage of housing land available.
G.1.8	The Applicant	The Planning Statement (APP-080) refers to the National Planning Policy Framework, 2012. The revised NPPF was published in July 2018. **Explain if the changes introduced by the revised NPPF 2018 have any relevance to the application.**
		Applicant's Response: Paragraph 5 of the revised NPPF 2018 reaffirms that the framework does not contain specific policies for nationally significant infrastructure projects which are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). In the absence of a directly applicable Airports NPS, it remains important and relevant to consider the provisions in the revised NPPF 2018. Many of the changes introduced into the revised NPPF 2018 relate to housing matters. There was also a revision to Green Belt policy introduced. These matters do not directly relate to the determination of the Manston Airport DCO application. Section (c) in Chapter 7 (paragraphs 7.45 to 7.93) of the DCO Planning Statement (APP-080) considered the draft text for consultation on the revised NPPF (March 2018) and highlighted the points that are relevant and important to the determination of the DCO. In finalising the revised NPPF for publication in July 2018, the points that are of relevance, or that

Ref No.	Respondent	Question
		are important to the determination of this DCO, have not been changed from those that were included in the March 2018 Consultation Draft. Therefore, the application, despite not being considered against the final publication version of the revised NPPF 2018, has nevertheless been assessed against the same national policy tests.
G.1.9	The Applicant Stone Hill Park Ltd	**Stone Hill Park Ltd (RR-1601] planning application to TDC** Manston Airport is being promoted for redevelopment for housing and mixed use scheme. **What is the current status of this proposal?**
	TDC	Applicant's Response: There are currently two live planning applications by Stone Hill Park Limited (SHP) for redevelopment of the Manston Airport site for a new mixed-use settlement as described in paragraphs 2.20 to 2.30 of the DCO Planning Statement (APP-080). **Hybrid Planning Application TDC reference OL/TH/16/0550 submitted 31st May 2016** A decision is still pending on this application which was for the comprehensive redevelopment of the Manston Airport site to create a new, mixed-use settlement comprising up to 2,500 new homes; an advanced manufacturing focused business park with some distribution/storage and office space; large scale – indoor and outdoor – sports and recreational facilities with the former runway becoming part of a network of parkland, trails and outdoor space; and a new heritage hub which will accommodate the Spitfire and Hurricane Memorial Museum and RAF Museum. The determination date for the application was October 2016 (2 years and 4 months ago). Certain additional information was requested by TDC after the application was submitted but before the determination date to allow it to determine the application. To date SHP has not provided the environmental information that was requested by TDC. This was information that SHP admitted that they had not provided at the time the application was submitted (transport, archaeology, ecology and contamination information). This is acknowledged in references made in the application documents where SHP commit to

Ref No.	Respondent	Question
		providing further information after submission of the application. TDC did not issue a Regulation 25 request for the 'missing' environmental information under The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regs 2017). The Applicant wrote to TDC on 31st May 2018 and recommended that they treat the application as being 'finally disposed of' (Article 40 of the General Development Procedure Order 2015) and recommended that the application should be removed from TDC's Planning Register. To date, no response has been received by TDC further to this recommendation. This application has not been formally replaced by planning application OL/TH/18/0660 (see below). **Hybrid Planning Application TDC reference OL/TH/18/0660 submitted 4th May 2018** A decision on this planning application is pending. The application also proposes the comprehensive redevelopment of the Manston Airport site for a mixed-use settlement but with a revised proposal from that presented in the 2016 application. Planning application OL/TH/18/0660 proposes a higher number of housing units (up to 3,700 new residential dwellings). The full description of the development is set out in paragraphs 2.27 and 2.28 of the Planning Statement (APP-080). The expiry date for a decision on the application was 15th August 2018. TDC confirmed in an email to the Applicant dated 15th August 2018 that they had requested further environmental information to be submitted by SHP in response to several matters raised by consultees. TDC confirmed that this information would require an addendum to the Environmental Statement. TDC has not made a formal request for this information under Regulation 25 of EIA Regs 2017 (as amended). SHP confirmed that this information would be submitted by the end of October 2018 but as far as the Applicant is aware it still has not been submitted, certainly it is not available on the TDC planning register. TDC extended the deadline for determination firstly until 31st December 2018 to accommodate the request for additional information but given that no information was submitted by this date, TDC has extended the deadline for a second time until 31st March 2019. Despite a Freedom of Information (FOI) request made by a member of the public on 3rd September 2018 (see Appendix G.1.9 in TR020002/D3/FWQ/Appendices), no information has been supplied by TDC as to what information has been requested from SHP. Regulation 20 request was not made.

<table>
<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
<tr><td></td><td></td><td>The 2018 application, much like the 2016 application, has attracted significant objections including some from statutory consultees who do not believe that their original objections to the 2016 application have been addressed. The planning application continues to represent a departure from the Development Plan.

It is important to point out that in agreeing numerous extensions to the deadline for determining their application, SHP are relinquishing their right to appeal on the grounds of non-determination each time the deadline is extended. Bearing this in mind and the fact that SHP continually fail to provide the additional information asked of them (and that this has been the case across two separate planning applications), it puts into question the seriousness of the SHP's intentions.</td></tr>
<tr><td rowspan="2">G.1.10</td><td rowspan="2">The Applicant</td><td>Detailed CVs

We note that brief resumes have been provided as a preamble to Chapter 1 of the ES [APP-033] as evidence of "Competent Experts".

Can the Applicant provide detailed CVs of the principal author of each assessment chapter in the ES (APP-033 to 036] and of the principal author of the rest of the ES and also the Azimuth Report?</td></tr>
<tr><td>Applicant's Response:

Detailed CVs for the principal authors of each chapter of the Environmental Statement are provided in Appendix G.1.10 in TR020002/D3/FWQ/Appendices. The authors' CVs and the relevant chapters are shown in Table 1. The CV for the author of the Azimuth Report is also attached.

<u>Table 1 - Environmental Statement principal authors of chapters</u>

<table><tr><th>Author</th><th>Chapter</th></tr></table></td></tr>
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Ref No.	Respondent	Question		
		Nick Hilton	Overseeing authorship of the ES including: Chapter 1 Introduction (**APP-033**) Chapter 2 The Need for the Proposed Development and the Alternatives Considered to Date (**APP-033**) Chapter 3 Description of the Proposed Development (**APP-033**) Chapter 4 Planning Policy Context (**APP-033**) Chapter 5 Approach to the Environmental Statement (**APP-033**) Non-Technical Summary (**APP-032**) Construction Environmental Management Plan (**APP-011**)	
		Martin Peirce	Chapter 6 Air Quality (**APP-033**) and any associated appendices	
		Mark Linsley	Chapter 7 Biodiversity (**APP-033**) and any associated appendices (other than Appendix 7.1)	

Ref No.	Respondent	Question		
		Mike Raven	Appendix 7.1 (**APP-044**)	
		Liz Buchanan	Chapter 8 Freshwater Environment (**APP-033**) and any associated appendices (other than Appendices 8.1 and 8.2)	
		Tim Haines	Appendix 8.1 (**APP-046 – APP-047**)	
		Ben Fretwell	Appendix 8.2 (**APP-048**)	
		John Mabbitt	Chapter 9 Historic Environment (**APP-033**) and any associated appendices	
		Barry Mitcheson	Chapter 10 Land Quality (**APP-033**) and any associated appendices	
		Ian Gates	Chapter 11 Landscape and Visual (**APP-034**) and any associated appendices	
		Steve Wright	Chapter 11 Landscape and Visual (**APP-034**) and any associated appendices	

Ref No.	Respondent	Question	
		Oliver Bewes and John Cookson	Chapter 12 Noise and Vibration (**APP-034**) and any associated appendices
		Colin Carter	Chapter 13 Socio-Economics (**APP-034**) and any associated appendices
		Bev Coupe and Glyn Price	Chapter 14 Traffic and Transport (**APP-034**) and any associated appendices
		Andrew Buroni	Chapter 15 Health and Wellbeing (**APP-034**) and any associated appendices
		Christopher Harris	Chapter 16 Climate Change (**APP-034**) and any associated appendices
		Kate Duff	Chapter 17 Major Accidents and Disasters (**APP-035)** and any associated appendices
		Emma North and Nick Hilton	Chapter 18 Cumulative Effects (**APP-035)** and any associated appendices
G.1.11	The Applicant	**Post-DCO process plans, systems and strategies**	

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<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
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The Applicant is committing to producing a number of plans, systems and strategies following the end of the DCO process.

Can the Applicant provide a definitive list of all these documents and the proposed associated approval process?

Applicant's Response:

The Register of Environmental Actions and Commitments (REAC) (APP-010) details a number of plans that will be prepared or finalised following the end of the Development Consent Order (DCO) process. Table 1 details the list of plans, the party responsible for approval and the requirement of the dDCO under which that approval is required.

It should be noted that in all cases the Secretary of State is identified as the discharging body. The reason for this is that the breadth of the subject matter contained within these plans and strategies the discharging requirements are beyond the capacity of any individual local authority. However, in many instances the approval is subject to consultation with other bodies.

Table 1 – Environmental Plans and Proposed Approval Process
<table>
<tr><th>Document name</th><th>Reference location</th><th>Timing</th><th>Details</th><th>Discharging body / Approval process</th><th>Provision of dDCO requiring approval</th></tr>
<tr><td>Construction Environmental Management Plan (CEMP)</td><td>APP-011

Referenced in APP-010</td><td>Live Document. To be approved post grant of DCO</td><td>The CEMP will be continually updated during the construction phase as contractors are appointed for each part etc.</td><td>Secretary of State for Transport (SoS) in consultation (as appropriate) with Thanet District Council (TDC), Kent County Council (KCC), the Environment</td><td>Requirement 6</td></tr>
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Ref No.	Respondent	Question						
						Agency, Southern Water, Historic England, Natural England, the Civil Aviation Authority (CAA), the Health and Safety Agency		
		Dust Management Plan (DMP)	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The DMP will be continually updated during the construction phase as contractors are appointed etc.	SoS in consultation with Thanet District Council (TDC)	Requirement 6	
		Mitigation and Habitat Creation Plan (MHCP)	Referenced in APP-010	To be finalised once DCO granted and surveys completed. Part of CEMP approval Part of ecological mitigation approval	A draft of the MHCP has been prepared but a revised version will be prepared at the end of the examination period, when the results of a number of additional ecological surveys will be available. The MCHP will be reviewed again when the full suite of	SoS in consultation with Natural England	Requirement 6 Requirement 8	

Ref No.	Respondent	Question						
					ecological surveys upon outcome of ecological surveys is known at the end of the examination period.			
		Spillage Environmental Response Plan / Environmental Spillage Plan	Referenced in APP-010	To be approved post grant of DCO Part of CEMP and Operation Environmental Management Plan (OEMP) approval	The plan will require detailed design (for example, of aircraft and fuel types) before it can be finalised.	SoS in consultation with Environment Agency and TDC	Requirement 6 Requirement 7	
		UXO Threat and Risk Assessment	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The unexploded ordnance risk assessment will be undertaken in a phased approach with assessment undertaken through site investigation.	SoS in consultation with TDC	Requirement 6	

Ref No.	Respondent	Question						
		Landscape Masterplan	Referenced in APP-010	To be approved post grant of DCO	The landscape masterplan requires detailed design and input from ecological surveys.	SoS in consultation with TDC	Requirement 10	
		Noise Mitigation Plan	APP-009 Referenced in APP-010	Finalised during DCO examination	The Noise Mitigation Plan (APP-009) will be reviewed through the DCO process with the aim of finalising.	SoS	Article 41	
		Noise and Vibration Management Plan	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	Part of s61 consent to be obtained by the contractor prior to the commencement of construction.	SoS in consultation with TDC	Requirement 6	
		Construction Traffic Management Plan (inclusive of staff travel plan, traffic routing strategy	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The CTMP will be continually updated during the construction phase as contractors are	SoS in consultation with Kent County Council (KCC)	Requirement 6	

Ref No.	Respondent	Question						
		and traffic timing strategy)			appointed etc. It needs agreement with KCC and will require updates following consulting with representatives.			
		Public Rights of Way (PRoW) Management Plan	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The PRoW management plan will be continually updated during the construction phase as contractors are appointed etc.	SoS in consultation with KCC.	Requirement 6	
		Construction Emergency Plan	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The Construction Emergency Plan requires detailed design information before it can be finalised.	SoS in consultation with TDC	Requirement 6	
		Site Waste Management Plan (SWMP)	Referenced in APP-010	To be approved post grant of DCO Part of CEMP and OEMP approval	The SWMP will be continually updated during the construction and operation of the airport.	SoS in consultation with TDC	Requirement 6 Requirement 7	

Ref No.	Respondent	Question						
		Construction Risk Assessment	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The Construction Risk Assessment will be updated as the construction process is ongoing.	SoS in consultation with TDC	Requirement 6	
		Carbon Minimisation Action Plan	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval	The Carbon Minimisation Action Plan can be produced now if needed.	SoS in consultation with TDC	Requirement 7	
		Operational Environmental Management Plan	Referenced in APP-010	To be approved post grant of DCO	The OEMP will be continually updated during the operational phase.	SoS in consultation (as appropriate) with Thanet District Council (TDC), Kent County Council, the Environment Agency, Southern Water, Historic England, Natural England, the Civil Aviation Authority, the Health and Safety Agency.	Requirement 7	

Ref No.	Respondent	Question						
		Operational Emergency Plan	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval.	Operational Emergency Plan requires detailed design information and will not be ready until the DCO is granted.	SoS in consultation with TDC	Requirement 7	
		Wildlife Hazard Management Plan	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval	The Wildlife Hazard Management Plan will be the responsibility of the Applicant to produce once the DCO is granted.	SoS in consultation with Natural England and the CAA.	Requirement 7	
		Habitat Management Plan	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval Part of ecological mitigation approval	The Habitat Management Plan will be the responsibility of the Applicant to produce once the DCO is granted.	SoS in consultation with Natural England	Requirement 7 Requirement 8	

Ref No.	Respondent	Question					
		Long Grass Policy	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval	Will be the responsibility of the Applicant to produce once the DCO is granted.	SoS in consultation with Natural England with TDC and CAA.	Requirement 7
		Emergency Response and Post-Crash Management Plan	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval	Will be the responsibility of the Applicant to produce once the DCO is granted.	SoS in consultation with CAA, the Environment Agency and TDC	Requirement 7
		Tree Survey and Protection Plans	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	The Tree Survey and Protection Plans feeds into the design process (i.e. leading to detailed design). Responsibility of the Applicant to produce once DCO granted.	SoS in consultation with TDC	Requirement 6
		Construction Safety Management Plan	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval	Requires detailed design.	SoS in consultation with TDC and the Health and Safety Executive	Requirement 6

Ref No.	Respondent	Question						
		Remediation Strategy (ies)	Referenced in APP-010	To be approved post grant of DCO	NB these will only be designed when required and following consultation with ES and relevant local authority.	SoS in consultation with the Environment Agency and TDC	Requirement 11	
		Drainage Strategy	Referenced in APP-010	To be approved post grant of DCO Part of CEMP approval Part of surface and foul water drainage approval	Outline Drainage Strategy provided with submission but Drainage Strategy to be refined as detailed design becomes available.	SoS in consultation with the Environment Agency and Southern Water	Requirement 6 Requirement 13	
		Surface Water Monitoring Strategy / Detailed Plan	Referenced in APP-010	To be approved post grant of DCO Part of surface and foul water drainage approval	Requires detailed design.	SoS in consultation with the Environment Agency and Southern Water	Requirement 13	

Ref No.	Respondent	Question						
		Method Statement for Environmental Monitoring	Referenced in APP-010	To be approved post grant of DCO Part of OEMP approval Part of ecological mitigation approval		SoS in consultation with Natural England and TDC	Requirement 7 Requirement 8	
AQ.1 Air Quality								
AQ.1.1	The Applicant	**PHE (RR-1608]** Section 6.4.3 of the ES [APP-033] discusses the cumulative effects and Table 6.3 identifies that: *"...the greatest impact of NO2 is on individuals with asthma or other respiratory conditions, but consistent impacts on these individuals is at levels of greater than 564 µg m3 , much higher than typical UK ambient concentrations..."* The discussion of effects only occurring at high concentrations of NO2 applies only to effects of short-term exposures. PHE recommends that the Applicant should demonstrate that the EU limit value for short term average concentrations (200 µg m-3 as a 1-hour average) will not be exceeded. WHO (2006) noted a meta-analysis indicating effects at levels exceeding this concentration.						

Ref No.	Respondent	Question
		What is the Applicant's view?
		Applicant's Response: The text quoted in question AQ.1.1 was provided in the chapter as background context information. The Applicant agrees with PHE that short-term NO_2 concentrations should be assessed against the 1-hour mean EU limit value of 200 µg m^{-3}. The air quality assessment in the ES [APP-033] has carried out this assessment, using the Defra guidance that if the annual mean concentration is below 60 µg m^{-3} then there is unlikely to be an exceedance of the 1-hour limit value. The air quality assessment presented in paragraphs 6.8.14, 6.9.14 and 6.10.13 of Chapter 6 of the ES [APP-033,] confirms that the limit value will not be exceeded at any relevant receptors.
AQ.1.2	The Applicant	**Air quality contour plots (APP-040]** Paragraph 9.109 of the Planning Statement [APP-080] states: *"Section 6.1 of the ES chapter recognises that the nature of the modelling process means that it has not been possible to include the contribution from road traffic in contours that have been plotted on plans/maps, so when viewing the contour plots it should be borne in mind that concentrations close to major roads will be greater than those shown. However, the road traffic concentration has been included in the assessment of specific receptors where there is relevant exposure. For similar reasons, it has not been possible to include the contribution from road traffic in the ecological assessment of daily mean NOx. The air quality assessment makes a number of worst-case assumptions, which means that air quality impacts are likely to be over-estimated. To assess how significant the impacts are, recommendations from the Institute of Air Quality Management and the EA."* **i. Will road traffic emissions have any significant effects on the Thanet Air Quality Management Area (AQMA)?**

Ref No.	Respondent	Question
		ii. Have contour plots for road traffic emissions alone been produced? **iii. The last sentence in the paragraph appears incomplete.**
		Applicant's Response: i. Road traffic emissions are not predicted to have significant effects on the Thanet Air Quality Management Area. The assessment presented in the ES shows that impacts of road traffic emissions are negligible everywhere within the AQMA [APP-033 paragraph 6.11.5 et seq]. ii. No, contour plots have not been produced for road traffic emissions. Using the transect (Design Manual for Road and Bridges (DMRB)) approach to modelling roads means gridded concentrations are not readily available, so contour plots could not be produced. Because the impact from roads is normally confined to receptors within a few tens of metres of the road, contour plots are harder to read and of less value for road sources than they are for extensive area sources such as the airport. iii. Paragraph 9.109 of the Planning Statement [APP-080] should read (changed text in *italics* below): Section 6.1 of the ES chapter recognises that the nature of the modelling process means that it has not been possible to include the contribution from road traffic in contours that have been plotted on plans/maps, so when viewing the contour plots it should be borne in mind that concentrations close to major roads will be greater than those shown. However, the road traffic concentration has been included in the assessment of specific receptors where there is relevant exposure. For similar reasons, it has not been possible to include the contribution from road traffic in the ecological assessment of daily mean NOx. The air quality assessment makes a number of worst-case assumptions, which means that air quality impacts are likely to be over-estimated*. These impacts are evaluated for significance in relation to the Air Quality Standards (AQS) as assessment levels set in legislation and in Government and international guidance.*

Ref No.	Respondent	Question
AQ.1.3	The Applicant	**Figure 9.1: Impact on NO2 concentrations from on-airport activity in the peak activity year (Year 20)[APP-080]** **Quantify what is meant by "*moderate*" in this Figure.**
		Applicant's Response: In Figure 9.1 of the ES [APP-080], the use of the term "moderate" means moderate adverse impacts, as defined by the Institute of Air Quality Management and Environmental Protection UK (IAQM/EPUK) criteria described in Chapter 6 of the ES [APP-033, Table 6.9]. This is consistent with the terminology used throughout the air quality assessment in the ES.
AQ.1.4	Natural England	**Air quality impacts on designated ecological sites** Paragraph 9.118 of the Planning Statement [APP-080] states: *"In terms of impacts on ecological sites, some exceedances of the annual mean NOx objective are predicted where major roads pass close to designated ecological sites, mainly because of levels of emissions from existing road traffic. The additional contribution from the Proposed Development, including airport-related traffic, is small, less than 7% of the objective at any major ecological site. The impact on air quality at local ecological sites is insignificant. Exceedances of the critical loads for nitrogen and acidity are predicted due to existing deposition rates, and the additional contribution from the Proposed Development is insignificant."* **Does NE agree that the air quality impacts on ecological sites are insignificant?**
		Applicant's Response: N/A

Ref No.	Respondent	Question
AQ.1.4	The Applicant	**Conservation of Habitats and Species Regulations 2017** Paragraph 6.2.7 of the ES [APP-033] refers to: *"Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations)."* **It should be 2017**.
		Applicant's Response: Correct, that was an error.
AQ.1.5	Natural England TDC	**Scoping out SO2, CO and VOCs** Table 6.2 of the ES [APP-033] scopes out the above compounds for the reasons given at paragraph 6.4.19 of the ES. **Do NE and TDC agree with this scoping out?**
		Applicant's Response: N/A
AQ.1.5	TDC	**Additional monitoring**

Ref No.	Respondent	Question
		Does TDC agree with the statement in paragraph 6.3.3 of the ES [APP-033] that no additional air quality monitoring was required?
		Applicant's Response: N/A
AQ.1.6	CAA	**Table 6.2 [APP-033] Rejection of Aviation Environmental Design Tool (AEDT) and use of Atmospheric Dispersion Modelling System (ADMS) rather than ADMS Airport** **What is the CAA view on row 6 of Table 6.2 [APP-033] on the Applicant's rejection of AEDT?**
		Applicant's Response: N/A
AQ.1.7	The Applicant	**Combined airport and road traffic emissions** ES paragraph 6.7.5[APP-033] states that the model provides a combined assessment of operational airport emissions and road traffic emissions in proximity to the airport. At distance from the airport ADMS roads is used to assess road sources. The distance at which the change in modelling approach takes place is not stated. **i. Confirm the distance from the airport at which combined airport and road traffic emissions stop being considered and only road traffic emissions are assessed.** **ii. The Applicant should provide detailed justification for the threshold adopted.**

Ref No.	Respondent	Question
		Applicant's Response: i. There is no fixed distance at which the airport contribution stops being considered. Sections 6.8–6.10 of the ES [APP-033] address impacts at all locations where there is a risk of a non-negligible impact from the airport and associated road traffic. As a guide, except in the urban centres (e.g. St Lawrence), impacts are classed as negligible (under guidance from the Institute of Air Quality Management and Environmental Protection UK: see paragraph 6.2.29 of the ES [APP-033]) where the contribution to annual mean NO_2 is less than 0.6 µg m^{-3}. Figures 6.11–6.14 [APP-040] show the 0.6 µg m^{-3} contour of annual mean NO_2 contribution from the airport, excluding roads, and it can be seen that impacts are negligible more than 2 km from the airport boundary. Since airport-related road vehicles travel further than 2 km from the airport, Section 6.11 of the ES [APP-033] provides an assessment of those road links where there is a risk of a non-negligible impact from the airport-related road traffic, but where Sections 6.8–6.10 have shown that there is negligible impact from the airport itself. ii. Since there is no fixed threshold, the justification is as explained above.
AQ.1.8	The Applicant	**Table 6.2 [APP-033] Project for the Sustainable Development of Heathrow (PSDH)** **i. Can the Applicant point to other similar airport developments where PSDH has been used to inform the approach to assessment?** **ii. Reference 19 of chapter 6 (APP-033] is the reference provided for PSDH, dated 6 March 2008. Provide any further documentation for PSDH.**
		Applicant's Response:

Ref No.	Respondent	Question
		i. The Applicant can provide the following list of examples of airport developments where PSDH has been used to inform the approach of the air quality assessment, all included in Appendix AQ.1.8 in TR020002/D3/FWQ/Appendices: • Heathrow's submission to the Airports Commission for third and fourth runways (part 1 of appendix); • Gatwick's submission to the Airports Commission for a second runway (part 2 of appendix); • The Airports Commission's assessment of the three schemes it shortlisted (part 3 of appendix); • Farnborough Airport's application for an increase from 28,000 to 50,000 movements per annum (part 4 of appendix); • London City Airport's Development Programme (part 5 of appendix); and • Bristol Airport's application for expansion to 12 million passengers per annum (part 6 of appendix). ii. The original documents produced by the PSDH are no longer available online. For the reports of the expert panels, which have been reformatted but contain the original content, see part 7 of the appendix.
AQ.1.9	Natural England	**Table 6.2 (APP-033] nonhuman receptors** **i. Are NE content that the Applicant's scope of non-human receptors considered in the air quality assessment considers the most sensitive habitats?** **ii. Has NE agreed the selection of non-human air quality receptors with the Applicant?**
		Applicant's Response: N/A
AQ.1.10	Natural England	**Paragraph 6.4.4. (APP-033] Cartesian Grid for Air Quality** This grid does not cover the full extent of the specific receptors.

Ref No.	Respondent	Question
	The Applicant	**i. Can the Applicant list the specific receptors that are not covered?** **ii. Does NE regard the grid coverage to be sufficient to cover the locations where the impacts are expected to be greatest?**
		Applicant's Response: i. Paragraph 6.4.4 of the ES [APP-033] is incorrect in that the modelled Cartesian grid was, in fact 14 km × 12 km. The sentence *"A **7km × 4km** Cartesian grid centred on the airport was modelled, with a receptor resolution of 100m, to assess the impact of atmospheric emissions from the site on local air quality at locations where specific receptors were not included."* should read "*A **14km × 12km** Cartesian grid centred on the airport was modelled, with a receptor resolution of 100m, to assess the impact of atmospheric emissions from the site on local air quality at locations where specific receptors were not included."* The extent of this grid can be seen in, for example, Figure 6.15 [APP-040]. Specific modelled receptors not covered by the grid are: • E01, E02 (representing western parts of the Thanet Coast SPA/SAC/Ramsar/SSSI complex); • E30, E31, E32, E33, E34, E35, E36, E37 (representing southern parts of the Sandwich Bay SPA/SAC/Ramsar/SSSI complex); and • E43, E44, E45, E46, E47, E48, E49 (representing the Stodmarsh SPA/SAC/Ramsar/SSSI complex). ii. These receptors are sufficiently far upwind of the airport that impacts are negligible, but were included in the assessment in accordance with Environment Agency guidance.
AQ.1.11		**Table 6.6 (APP-033]**

Ref No.	Respondent	Question
	Natural England PHE TDC	**Do NE, PHE and TDC have any comments on rationale for incorporation of the environmental mitigation measures proposed in Table 6.6 (APP-033]?**
		Applicant's Response: N/A
AQ.1.12	The Applicant	**Paragraph 6.7.2 (APP-033]** Emissions from the following sources have been calculated: • Aircraft on the ground; • Aircraft in the air up to 3,000ft (914m). • for years 2, 6 and 20. **Are the sources calculated based on the number of ATMs shown in Tables 3.7 and 3.8 (APP-033]?**
		Applicant's Response: Yes, the sources calculated are based on the number of ATMs shown in Tables 3.7 and 3.8 [APP-033], except that a contribution from the flying school has also been included (see Table 6.15, APP-044 for the full aircraft fleet modelled).
AQ.1.13	The Applicant	**Table 6.25 (APP-033]**

Ref No.	Respondent	Question
		Is the contribution from road traffic emissions included in Table 6.25?
		Applicant's Response: Yes.
AQ.1.14	The Applicant	**Paragraph 6.1.10 of Appendix 6.3 (APP-044]** Paragraph 6.1.10 states: *"Few of the PSDH recommendations are specific to Heathrow and the methodology can be used for other airports of comparable size..."* **Is Manston Airport of "*comparable size*" to Heathrow Airport?**
		Applicant's Response: Manston Airport will have far fewer aircraft movements than Heathrow Airport and is not of comparable size as such. What was meant was that both airports serve aircraft of comparable sizes and the technical issues around how to model air quality are very similar. In particular, at both airports the aircraft fleet is dominated by jet-engine airliners or freighters, with a maximum take-off weight mostly greater than about 60 tonnes (Airbus A320 class and larger). As such, the recommendations from PSDH are an important source of guidance for assessing the air quality impacts of the Proposed Development.
AQ.1.15	The Applicant	**Paragraph 6.1.11 of Appendix 6.3 (APP-044] PSDH model evaluation**

Ref No.	Respondent	Question
		"The model evaluation found that it gave a generally good agreement with the extensive monitoring data around Heathrow, and formed a suitable basis for evaluating the impacts of future airport developments there". **Quantify what is meant by "*generally good agreement*".**
		Applicant's Response: The Heathrow study conducted a very detailed and complex quantitative evaluation, with a large number of results. Its overall conclusion was that no model adjustment was required for most emissions sources, while an adjustment factor of 1.21 should be applied to the roads contribution to NOx concentrations. This factor of 1.21 was attributed to either use of interim traffic data in the Heathrow study which had not been fully validated, or to then new concerns that road traffic emission factors were too low. Necessarily the Manston DCO assessment uses different traffic data, and in the 9 years since the Heathrow study a great deal of work has been done to ensure that road emission factors agree with real-world emissions. For these reasons, it is not appropriate to use the 1.21 factor in the modelling for the present assessment. A separate verification factor for road traffic has been derived based on local monitoring in accordance with Defra recommendations. For a full quantification of the model agreement, please refer to the model evaluation report at Appendix AQ.1.15 in TR020002/D3/FWQ/Appendices.
AQ.1.16	CAA	**Paragraph 6.1.15 of Appendix 6.3 [APP-044]** **i. Is detailed documentation on the Aviation Environmental Design Tool AEDT methodology available from the Federal Aviation Administration (FAA)?** **Ii. What is the CAA view on the applicability of the recommendations of the PSDH to Manston?**
		Applicant's Response:

Ref No.	Respondent	Question
		N/A
AQ.1.17	The Applicant	**Paragraph 6.1.18 of Appendix 6.3 [APP-044] PSDH model and ICAO advanced** **Explain what is meant by "*generally consistent*"?**
		Applicant's Response: 'Generally consistent' means that where PSDH or ICAO make a specific recommendation for modelling airport air quality that is suitable for use in the Manston Airport assessment, these have been followed unless stated otherwise in the ES [APP-044, Appendix 6.3]. The general principle of both methodologies is that emissions are calculated by determining the aircraft fleet, assigning engine types to each aircraft type, obtaining emission factors from the ICAO databank (for jet engines), and multiplying by times in mode for various thrust settings. These emissions are then entered into a local dispersion model to obtain concentrations of pollutants at receptors. This approach has been followed for the assessment in the ES and is therefore considered 'generally consistent' with the ICAO advanced and PSDH model. Beyond that, neither PSDH nor the ICAO methodology are a unified package forming a single coherent freestanding model. Rather they are sets of recommendations on some of the many detailed issues that face the airport air quality modeller, such as the calculation of emissions of PM given smoke number, accounting for the effects of engine deterioration, calculation of APU emissions, and many others. They are necessarily presented on the basis that the modeller will use the best approach to each issue in the light of the particulars of the airport scenario being modelled and the availability of data. It is in this light that the assessment for the ES was approached. For example, PSDH and ICAO differ in their recommendations for calculating emissions from APUs; given the absence of airport-specific data, the more generic approach suggested by ICAO was adopted for the assessment.

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		The main focus of PSDH was forecasting future emissions from an expanded Heathrow Airport, while ICAO addresses only historic inventories and attempts to be much more generic. As such a number of differences inevitably occur, and it is a matter of professional judgement for the modeller to choose which, if either, to adopt. In some cases, PSDH was able to use data obtained specially for its work, which has not been made publicly available, for example on APUs, forward speed effects and ambient condition effects. In these cases it was not possible to follow PSDH. On many issues, both PSDH and ICAO are effectively silent, for example on how to analyse data to obtain times in mode, or how to configure the sources for entry into a dispersion modelling tool. These are left to the professional judgement of the modeller.
AQ.1.18	The Applicant	**Table 6.15 of Appendix 6.3 [APP-044]** **Does Table 6.15 [APP-044] represent the number of freight and passenger ATMs which have assessed in the EIA?** Paragraphs 1.31 and 1.34-1.36 of the Planning Statement [APP-080] state: *"No limit on daytime flights is being applied for, and therefore the applied-for capability is the physical capability of the Proposed Development to handle flights during the day."* **Is the *"physical capability of the Proposed Development"* different from the number of freight and passenger ATMs which have been assessed in the EIA?**
		Applicant's Response: i. Yes, table 6.15 shows the modelled values for Nutrient Nitrogen Deposition in year 2 and therefore reflects the number of freight and passenger ATM's expected in that year. Table 6.22 and 6.31 report on the same pollutant and reflect the ATMs in years 6 and 20 respectively.

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		ii. Yes, because the Applicant considers that the airport once operational will not exceed the number of freight and passenger ATMs which have been assessed in the ES. The number assessed in the ES is that of the year the airport reaches full operation, which is 20 years after opening. Given the concern expressed about this issue in relevant representations and the Examining Authority through its questions, and since the Applicant does not expect the number of ATMs assessed in the ES to be exceeded, it is now adding an annual limit of ATMs equivalent to the number assessed in the ES, namely, 17,170 cargo plus 9,298 passenger movements, i.e. 26,468 movements in total. This cap has been included in the revised Noise Mitigation Plan (TR020002/D3/2.4) being submitted at Deadline 3. This total includes the movements generated by the 3 recycling stands but does not include general aviation movements. To put this into context, in 2017 Heathrow had 467,186 ATMs, 18 times as many, and the figure would make Manston the 18th busiest airport in the UK, just above Jersey. It is 73 ATMs a day on average.
AQ.1.19	The Applicant	**Limits on daytime flights** Paragraphs 1.31 and 1.34 to 1.36 of the Planning Statement [APP-080] state: *"No limit on daytime flights is being applied for, and therefore the applied-for capability is the physical capability of the Proposed Development to handle flights during the day.* *This leaves the critical factor as the ability to handle aircraft safely and simultaneously. RiverOak's aviation expert advice is that on a conservative basis, a single cargo stand can turn around an aircraft every 2.5 hours, i.e. six aircraft or 12 movements between 0700 and 2300 per day.* *The Proposed Development is to reconstruct the airport with 19 cargo stands (and some passenger stands, which will not handle cargo aircraft), the construction of which will involve development in planning terms. Using the figure of six arriving and departing aircraft per stand per day (i.e. between 0700 and 2300 – as only limited night flights are contemplated), one arrives*

Ref No.	Respondent	Question
		at a theoretical maximum capability figure of (19x12x365=) 83,220 movements per year, and therefore the capability of the airport will be at that level, noting that this is theoretical capability rather than predicted operation. *The increase in capability is therefore 83,220 movements per year of cargo aircraft, more than eight times the required threshold, assuming the existing capability is zero, as demonstrated above."* **i. Reference is made to "*some passenger stands*". Would these add to the 83,220 movements per year of cargo aircraft?** **ii. What is the total "*physical capability*" of the Proposed Development in terms of ATMs/year and how has that been assessed in the EIA?**
		Applicant's Response: i. Yes. The 83,220 ATMs refers to cargo ATMs for the purposes of the nationally significant infrastructure project. See the next part of this answer for a further explanation. ii. The 'physical capability' of the Proposed Development is 83,220 (for the cargo stands), 43,800 (for the passenger stands) plus about 36 (for the recycling stands) = 127,052 ATMs. This has not been assessed in the ES, as it does not represent the realistic worst-case number of ATMs. See the answer to OP.1.11 for how these figures were derived. Given the concern expressed about this issue in relevant representations and by the Examining Authority through its questions, and since the Applicant does not expect the number of ATMs assessed in the ES to be exceeded, it is now adding an annual limit of ATMs equivalent to the number assessed in the ES, namely 17,170 cargo plus 9,298 passenger movements, i.e. 26,468 movements in total. This cap has been included in the revised Noise Mitigation Plan

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		(TR020002/D3/2.4) being submitted at Deadline 3. This total includes the movements generated by the 3 recycling stands but does not include general aviation movements. To put this into context, in 2017 Heathrow had 476,186 ATMs, 18 times as many, and the figure above would make Manston the 18th busiest airport in the UK, just above Jersey. It is 73 ATMs a day on average.
AQ.1.20A	The Applicant	**Diesel emissions and ICAO engine data** The baseline assessment uses the Defra Emission Factor Toolkit (EFT) v7 uplifted by Calculator Using Realistic Emissions for Diesels (CURED) v2A. **i. Confirm what effect the use of EFT v8 emissions factors and Calculator Using Realistic Emissions for Diesels (CURED) v3A would have on the air quality assessment.** **ii. Confirm whether the revised ICAO engine data issued in November 2017 and May 2018 would affect the findings of the assessment.**
		Applicant's Response: i. For all the combinations of speed and heavy duty vehicle fraction used in the assessment, and for each assessment year, the NO_x emissions calculated using EFT v7 / CURED v2A emission factors are higher than those calculated using EFT v8 / CURED v3A, although PM emissions (for which the CURED uplift is not available) are slightly lower. Version 8 of the EFT was not issued until December 2017, after the modelling work was completed. The modelling work for the ES used EFT v7 uplifted by CURED v2A [APP-044, paragraph 6.1.77]. The assessment in the ES is worst-case, since impacts from PM are negligible. ii. The revised ICAO data would reduce ground-level NOx emissions from aircraft by 0.1%, which is not considered material and will not affect the findings of the assessment in the ES [APP-044]. This difference arises from the 3RR030 engine

Ref No.	Respondent	Question
		assigned to the A330-200; the data for this is marked in the latest version of the databank as being superseded by new data (given the UID 14RR071). Other changes in the databank are the introduction of new engines. Since the approach to engine assignments has been to use fairly old engines where suitable for conservatism, this does not affect the assessment.
AQ.1.20B	The Applicant	**WebTag** The ES [APP-033] includes a monetised assessment of air quality effects based on the WebTag methodology. The basis for the WebTag calculations is uncertain, since the relevant exposure level for inclusion of receptors in the assessment is not stated. **i. Provide details of the air quality exposure level used to establish the population exposure used in WebTAG calculations.** **ii. Provide a map illustrating the extent of this exposure.**
		Applicant's Response: i. Population exposure was calculated within the whole area for which gridded concentrations were calculated, namely easting 627000 to 641000, northing 160000 to 172000. In Year 20, the NO_2 concentration in the southwest corner is 0.1 µg m^{-3} (the other three corners are in the sea). ii. See Appendix AQ.1.20B in Appendices/D3/FWQs/Appendices for this Study Area.
AQ.1.21	The Applicant	**European sites**

Ref No.	Respondent	Question
		ES paragraph 6.11.32 discusses a location 60m from the road that is representative of the Ramsar, SPA and SAC receptor and ES paragraph 6.11.34 [APP-033] discusses a location representative of the Foxes Bottom LNR. Chapter 6 does not illustrate these locations or explain why they are representative. **i. With reference to the figures accompanying chapter 6, provide clarification of the receptor number referenced in ES paragraph 6.11.32 as being 60m from the A256 that is considered to be representative of the Ramsar, SPA and SAC site; and the location at 45m from the A299 that is representative of Foxes Bottom Local Nature Reserve.** **ii. Provide justification as to why these locations are representative of the worst case impact on the designated sites.**
		Applicant's Response: i. The location 60m from the A256 represents the closest point of the road to the Sandwich Bay SAC/SPA/Ramsar/SSSI complex at grid reference 633429,160307, and the location 45m from the A299 represents the closest point of the road to the Foxes Bottom LNR at grid reference 609246,163741. ii. The locations identified in question AQ.1.21 are not specific receptors, as listed in Appendix 6.1 [APP-044]. They are roadside locations, and the contribution from the airfield is negligible, therefore the roads transect approach has been used to determine concentrations. Both locations are the closest points of the road to the ecological receptors and therefore representative of the worst impact from road traffic on the designated sites. Receptors representative of the worst impact from the airport are assessed in Sections 6.8–6.10 of the ES [APP-033].
AQ.1.22	The Applicant	**Air quality contours combined**

Ref No.	Respondent	Question
		ES paragraph 6.1.6 [APP-033] explains that emissions from road traffic cannot be incorporated into contour plots. Consequently emissions are higher at roadside locations than shown. The ES explains that road traffic concentrations have been included in the assessment of specific receptors with relevant exposure. The ES goes onto state that: *"For similar reasons, it has not been possible to include the contribution from road traffic in the ecological assessment of daily mean NOx."* **Explain whether the assessment of NOx includes road traffic NOx emissions and, if not, how this represents a worst case assessment in air quality terms.**
		Applicant's Response: The table of daily mean NO_x concentrations at ecological receptors [Table 6.30, APP-033] does not include the road contribution, as stated in the text. The concentrations at ecological receptors are well below the assessment level of 200 µg m^{-3} and meet the Environment Agency's criteria for screening out as insignificant. The contribution to maximum daily mean NOx may be estimated approximately by multiplying the annual mean contribution by 2 (according to Environment Agency guidance *Air emissions risk assessment for your environmental permit*). Adding this contribution to daily mean NO_x from aircraft and background, the greatest total concentration (PEC) at any receptor is 106 µg m^{-3} or 53% of the assessment level in Year 2 at the E41 receptor (representing the Sandwich Bay to Hacklinge Marshes SSSI where it adjoins the A256). The PEC at all receptors is comfortably less than 70% of the assessment level, so are insignificant under the Environment Agency's criteria.
AQ.1.23	TDC The Applicant	**Air quality monitoring** The ES proposes to provide funding to TDC to reinstate air quality continuous monitoring at the ZH3 Thanet Airport location. This will monitor NO and NO2 at hourly intervals in real time.

Ref No.	Respondent	Question
		i. Does TDC consider that the proposed monitoring is sufficient for operational air quality emissions arising from the Proposed Development and is the approach agreed with the Applicant? **ii. What remedial action does TDC consider should be undertaken in the event that emissions are worse than forecast due to the Proposed Development?** **iii. How is funding secured for the continuous monitoring?**
		Applicant's Response: i. N/A ii. N/A iii. The Applicant will fund this cost through the s.106 agreement it is preparing with Thanet District Council.
AQ.1.24	The Applicant TDC	**Government's Clean Air Strategy** **Are there any implications from the Government's new Clean Air Strategy (https://www.gov.uk/government/publications/clean-air-strategy-2019) for the Proposed Development?**
		Applicant's Response: The Applicant considered the implications arising from the Government's new Clean Air Strategy when it was published on 14 January 2019. No specific policies in the Clean Air Strategy have been identified that will have implications for the Proposed Development. No local authorities in Kent have been required by Defra to investigate measures to ensure compliance with EU limit values in the shortest possible time, and no Clean Air Zones are expected.

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		The principal impact of the Clean Air Strategy will be to reduce concentrations of air pollutants across the country as a whole, and especially in major urban centres and other locations at or close to exceedance of the EU limit values. Note that the quantitative air quality assessment has not taken any credit for future reductions in background concentrations [paragraph 6.5.26, APP-033], whether achieved through the Clean Air Strategy or other actions; one major implication of reduced background concentrations is that the impact at the St Lawrence receptors will be classified as 'negligible' rather than 'slight' [paragraph 6.10.18, APP-033]. The Clean Air Strategy has little to say about aviation, referring instead to the draft Aviation 2050 strategy. This in turn has few specific proposals with regard to air quality impacts of future developments, apart from a requirement for sustainable growth. The proposed measures in relation to air quality focus on monitoring, reporting and planning, plus industry-wide technological improvements.
CA.1 Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations		
CA.1.1	The Applicant	**Justification** Paragraph 8.1 of the Statement of Reasons [APP-012] states that: "Due to the nature of the Proposed Development powers are sought to acquire outright the main airport site, the Northern Grass and the subsoil where the Pipeline is positioned." **Explain what is meant by "the nature of the Proposed Development" means in this context.**
		Applicant's Response: In this context, "the nature of the Proposed Development" means the Applicant's proposals to acquire and re-open what is already an existing site of a formerly operational airport. In order to maintain the integrity of the existing airport boundary

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		and to secure the supporting development the Applicant is seeking outright acquisition of the Order Land. If the Applicant had less than full control over the land this would be likely to interfere with its ability to effectively construct and operate the airport.
CA.1.2	The Applicant	**Justification** Paragraph 9.19 of the Statement of Reasons [APP-012] states that: "In common with other projects, detailed design may avoid acquisition of some of the land that is within the scope of compulsory acquisition powers in the application; only land that is required for the development will be acquired." **Show where the draft DCO (APP-006] secures this.**
		Applicant's Response: Article 19 of the dDCO which authorises the acquisition of land by compulsory purchase, grants the powers to the Applicant to only acquire such of that land as is required for the project. These powers are intended to ensure sufficient flexibility in the detailed design of the project. The dDCO generally includes full land acquisition powers. However, in any individual case, the exercise of these powers will operate on the basis that the Applicant will acquire no greater amount of land than appears to it to be reasonably required following detailed design. If it is practicable to acquire a smaller area of land without compromising the Applicant's ability to secure the effective construction and operation of the project, and it becomes clear following detailed design that some of the land is not required, such land will be outside the scope of compulsory acquisition powers and will not be acquired.
CA.1.3	The Applicant	**Justification**

Ref No.	Respondent	Question
		With reference to paragraph 9.22.1 of the Statement of Reasons (APP-012], provide examples of where the person with an interest in land cannot grant the relevant land interest or right at the time when the option is exercised.
		Applicant's Response: It may be the case on exercise of an option agreement that a landowner cannot grant the relevant interest if they are unable, incapacitated or unwilling to do so. Examples of this may include where a landowner has passed away and their estate remains in probate or, in the case of a body corporate, they have become insolvent or struck off the register of companies. In such circumstances the relevant owner at the time would be unable to enter in to any freehold transfer, lease or other legal agreement. A landowner may also breach the terms of an option agreement and, if unwilling to adhere to it, it may become time consuming to pursue a remedy through the Courts. In all such cases the Applicant does not want this Proposed Development, which is of national significance, to become undeliverable if the land cannot be assembled on time for construction and the grant of compulsory acquisition powers provides an appropriate fallback position in these cases. This justification for the grant of compulsory powers, where agreement has already been reached, has precedent in other DCO applications such as the consented Hinkley Point C Connection and Richborough Connection Projects.
CA.1.4	The Applicant	**Land Requirement - Works Nos. 15, 16 and 17** Paragraph 45 of the NSIP Justification Document [APP-008] states that: "Note that all of the above elements are in their nature airport-related, except potentially the development of the so-called 'Northern Grass' (which is divided into three zones and described as Works 15 to 17), which could become unrelated to the airport if it was not controlled in some way. To ensure that this remains in support of the operation of the airport, the Development Consent Order requires the uses at the Northern Grass to be airport-related in the description of those works." In its description of Works Nos. 15, 16 and 17, the draft DCO [APP-006] does not require the uses at the Northern Grass to be airport-related in the description of those works.

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		The ExA further notes that, for example, the wireline views in Appendix 11.1 of the ES Volume 12: Appendices 10 .1, Appendix B – 12.14 [APP-057] distinguish between 'airport development' and 'business development'. **Given this, show how, any request for Compulsory Acquisition in relation to Works Nos. 15, 16 and 17 fulfils the statutory requirement in PA2008 s.122(2)(a) or (b).**
		Applicant's Response: Following the Issue Specific Hearing (ISH) on the dDCO which considered this issue, the Applicant has amended the description of Works Nos. 15-17 in the dDCO to clarify that the works must be "airport-related". The revised version of the dDCO, incorporating this change is issued together with the responses to these questions at Deadline 3 (TR020002/D3/2.1). Further explanation as to why Works Nos. 15-17 constitute associated development within the meaning of section 115 of the Planning Act 2008 is set out in the documents submitted at Deadline 1, in particular please see the new Annex 4 to the revised NSIP Justification document provided at Deadline 1 (TR020002/D1/2.3). Given that the proposed Works Nos 15-17 constitute associated development (for the reasons set out in the abovementioned document), the request for Compulsory Acquisition in relation to those works fulfils the statutory requirement of s.122 (2) (b) by virtue of the land being required for those works being "incidental to that development". This is an accepted approach to compulsory acquisition in respect of the land required for associated development across DCO applications. In terms of references to 'airport development' and 'business development' noted on the wirelines views Appendix 11.1 of the ES Volume 12: Appendices 10 .1, Appendix B – 12.14 [APP-057], at the time of writing that document, such references were used more generally to distinguish between 'airside development' and 'non-airside' airport-related development for illustrative purposes of the wireline views. This has been removed in revised wirelines submitted at Deadline 3 (ref Appendix CA.1.4 in TR020002/D3/FWQ/Appendices). The precise definition of the relevant works and their purpose is set out in the dDCO.

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CA.1.5	The Applicant	**Land Requirement** – **Plots 015b, 017, 020, 021, 022, 023, 024, 025** With reference to Appendix 1 in the Statement of Reasons [APP-012], **clarify what is meant by glide path safeguarding in relation to plots 015b, 017, 020, 021, 022, 023, 024, 025**
		Applicant's Response: To maintain the integrity of an aerodrome's operations and especially those with Instrument Flight Procedures (IFPs), aerodrome licensees will ensure that the Obstacle Limitation Surfaces (OLS) are safeguarded against any development that may impact upon their operation. The IFPs and OLS define 3-Dimensional slopes and glide paths which should be clear of physical obstruction and safeguarded, to ensure safe aircraft approaches and departures from an aerodrome. The Applicant will apply, in accordance with Civil Aviation Publication (CAP) 738 (*Safeguarding of Aerodromes),* which provides guidance to those responsible for the safe operation of an aerodrome, the appropriate safeguarding criteria to assess what impact a proposed development or construction might have on aircraft in the final stages of flight. The information required to make this assessment is detailed in CAP 168, *Licensing of Aerodromes*. The plots referred to above (015b, 017, 020, 021, 022, 023, 024, 025) were previously safeguarded by the former Manston Airport operators / owners for this reason.
CA.1.6	The Applicant	**Land Requirement** – **Pipeline and outfall** In relation to the pipeline leading to the outfall at Pegwell Bay, **justify in detail the extent of the land with plots shown in blue in Insets A, B, C, D, E and F in the Land Plans [APP-016]**
		Applicant's Response:

Ref No.	Respondent	Question
		Permanent rights sought on Insets B, C, D, E and F The Applicant is seeking ownership of an existing underground pipeline (Pegwell Bay Outfall) for the purposes of discharging surface water from the site. The areas shown blue represent overland access routes to existing pipeline manholes which lie on private land. These routes are required to provide access to the manholes for the purposes of maintenance. A nominal width of 6m has been allowed for to ensure sufficient access for maintenance equipment. Access routes have been chosen that utilise existing paved surfaces where possible and / or minimise the permanent right acquisition. A summary of each access route being sought is given below Inset B: Right of access to existing manhole within a farmers field. Access begins at the western end of Clive Road and follows the field boundary. Inset C: Access route to manhole within front garden of residential property 54 Foads Lane. Access route to manhole within rear garden of residential property 63 Foads Lane Partial view of access across private land. Access route shown makes use of an existing concrete pavement in which most of the manholes are situated. The manhole at plot 142 is accessed via the concrete pavement as far as possible and then the shortest route over soft ground. Inset D: Continuation of above access route to manholes within private land, route follows concrete pavement to gate onto Cliffsend road.

Ref No.	Respondent	Question
		Access to manhole in front drive of 24 Meverall Avenue Access to manhole in front garden of 4 Meverall Avenue Partial view of access to manhole and outfall at old hoverport. <u>Inset E:</u> Plot 185bcdf, view of access route along existing pavement and short area of grass to manhole in plot 185f. Partial view of access route to manholes in the old hoverport and to pipeline outfall. Route follows existing pavement and hoverport access road. <u>Inset F:</u> Partial view of access route to manholes in the old hoverport and to pipeline outfall. Route follows existing hoverport access road. Note: The permanent rights being sought at the entrance to the Jentex site on Inset A are unrelated to the pipeline manholes. The acquisition of permanent rights over plot 073, as per Appendix 1 of the Statement of Reasons [APP-012], is sought to provide access to Work No.19. Work No.19 is defined in Schedule 1 of the dDCO (APP-006) as for the construction of new or improved facilities to create an airport fuel farm on the site of an existing fuel storage facility. This remains the same in the updated dDCO being submitted for Deadline 3 (TR020002/D3/2.1).
CA.1.7	The Applicant	**Land Requirement** – **Pipeline and outfall** Paragraph 10.8 of the Statement of Reasons [APP-012] states that:

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		"There has been contact from several parties affected on the pipeline plots, with queries raised. In response to this, RiverOak will be arranging a meeting to be held at the Cliffsend Village Hall, or other suitable local venue, to discuss the proposals further." **i. Has such a meeting been held** **ii. If so, provide information on the outcomes of that meeting**
		Applicant's Response: i. The Applicant can confirm that a meeting was held at Cliffsend Village Hall to discuss the proposals in respect of the underground pipeline on Friday 11 January 2019. ii. The meeting at Cliffsend Village Hall was attended by Tony Freudmann, Robert Grinnell (both of the Applicant), Geoff Dewick (RPS), Chris Johnson (RPS) and Colin Smith (CBRE) on behalf of the Applicant. The Applicant's team explained to the attendees that no one was claiming ownership of the underground pipeline which runs from the runway under the village of Cliffsend into the sea at Pegwell Bay. The Applicant had decided to seek compulsory acquisition in respect of the pipeline in order to take responsibility for its maintenance and repair. The Applicant had identified houses in Cliffsend where the pipeline runs under gardens. These houses fell into two categories: those where there is an inspection manhole in the garden and those where the pipeline simply runs through. In both cases the Applicant explained that the compulsory acquisition would include some subsoil and, in the case of those gardens where there is a manhole, a right of access for inspection, maintenance and repair. The Applicant explained that it would pay the reasonable legal fees of each affected householder plus a nominal sum by way of compensation for the inconvenience. Several house owners asked about the condition of the pipeline. RPS on behalf of the Applicant explained that they had run a video camera down the length of the pipeline and the evidence showed that the pipeline is in excellent condition. Those present were shown images of the pipeline as it passed under their properties.

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		All present indicated their approval of what was being proposed and they were advised that they would all be written to individually during the next few weeks.
CA.1.8	The Applicant	**Land Requirement** **Paragraph 8.38 of the Statement of Reasons [APP-012] states that:** "... due to the nature of the design process and the timing of the consenting process, RiverOak requires a degree of flexibility as to where certain sections of the proposals can be constructed within the defined limits of deviation which are provided for in the draft Order." **Given this, show how you can assure be made that the statutory requirement in PA2008 s122(2)(a) or (b) is fulfilled in this respect.**
		Applicant's Response: Article 3 of the dDCO [APP-006] provides for the undertaker to be granted consent to construct the "authorised development". The authorised development is defined in article 2 of the dDCO as "the development and associated development described in Schedule 1 (authorised development) or any part of it, which is development within the meaning of section 32 (meaning of development of the 2008 Act". Schedule 1 describes the various elements of the authorised development (both NSIP and associated development). Appendix 1 of the Statement of Reasons [APP-012] explains the purposes for which each of the plots subject to compulsory acquisition or temporary possession, all of which are related to elements of the "authorised development" described in Schedule 1 to the dDCO. This demonstrates that the compulsory acquisition of this land meets the test in s.122(2) of the PA 2008 in that it is land required for the development to which the development consent relates or land that is required to facilitate or is incidental to the development. It is worth noting that, for the airside elements of an airport NSIP, there is a need to maintain integrity of the site and its boundary for airport security and safety purposes.

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		Paragraph 8.38 of the Statement of Reasons correctly states that some flexibility is required in the final design of the Proposed Development. However, this does not indicate that there is doubt over whether certain areas of land are required. The Masterplan [APP-079] illustrates the likely location of all the elements of the Proposed Development that would be authorised under the DCO. More importantly, the Works Plans [APP-018] show the limits within which each of the Schedule 1 works must be located. Article 6(1)(a) does provide some flexibility as to where each work is located within its Works limits. This does not give rise to any doubt over whether parts of that zone will be required, only about the exact location and design that the Work will take within each zone. In general, the use of limits of deviation is a well-recognised concept that allows for a certain flexibility in locating elements of a project once construction is under way, reducing the need to change the authorisation subsequently. The wording of Article 19 of the dDCO ensures that only land 'required' for the project may be acquired.
CA.1.9	The Applicant	**Public Interest** The Applicant is reminded that Section 122 of Planning Act 2008 requires that the Secretary of State must be satisfied that there is a compelling case in the public interest for the Compulsory Acquisition. **All parties should note that the ExA will have regard to any answers provided to other questions including those on the need and socioeconomic impact in assisting it to address this statutory requirement.**
		Applicant's Response: The Applicant agrees with the ExA's intention to have regard to any answers provided to other questions including those on the need and socioeconomic impact in assisting it to address the statutory requirement under Section 122 of the Planning Act 2008.

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CA.1.10	The Applicant	**Reasonable Alternatives** DCLG Guidance related to procedures for the compulsory acquisition of land (2013) advises at paragraph 8 that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) should have been explored. The ExA has made a procedural decision in the Rule 6 letter to require the Applicant to provide an initial CA Status Report at Deadline 3, to accompany the responses to these questions. **Detail your approach to negotiation with Affected Parties including the timing and nature of negotiations held and intended timescales for reaching agreement.**
		Applicant's Response: The Applicant advised in the Statement of Reasons [APP-012] at paragraph 10.7 its approach to negotiation with affected parties. The Applicant has issued letters seeking to meet and progress negotiations with all 163 Category 1 persons (being freehold owners, tenants / lessees and occupiers) within the Order land. Letters were issued in early 2018 and the Applicant issued follow up letters in September and October 2018 with further invitations to progress with those parties that had not become engaged in more detailed discussions. 25 parties have responded and/or engaged in negotiations to date. In respect of the underground pipeline, letters were issued to affected parties on the pipeline route in December 2018 inviting them to make contact and/or attend the meeting at Cliffsend Village Hall held on 11 January 2019 to discuss the proposals. The Applicant remains committed to meeting and commencing commercial negotiations with willing parties as soon as possible and will continue to advise affected parties accordingly of its intentions during the course of examination. It is not possible at this early stage in correspondence to indicate a reasonable timescale for reaching agreement with all parties, however where negotiations do progress sufficiently the Applicant should be able to provide an indication to the ExA during the Examination period.

Ref No.	Respondent	Question
		The Applicant has submitted a Compulsory Acquisition Status Report at Deadline 3 (document reference TR020002/D3/CASR) which provides further specific details of the Applicant's approach to negotiations in respect of each Category 1 person to date.
CA.1.11	The Applicant	**Reasonable Alternatives** DCLG *Guidance related to procedures for the compulsory acquisition of land* (2013) advises at paragraph 8 that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) should have been explored. **Provide details of any previous initiatives to seek the Compulsory Purchase of this site by yourselves or by any firms or bodies, including any by River Oak Investments, from which you have accepted all responsibilities.**
		Applicant's Response: In 2014, at the request of the Thanet District Council (TDC), which was then led by the Labour party, RiverOak's US predecessor RiverOak Investment Corp (RIC) proposed to partner with the Council on a Compulsory Purchase Order (CPO) where RIC would fully indemnify the Council from all costs associated with the CPO. Ultimately that effort was rejected by TDC. In the run-up to the 2015 elections, both UKIP and the Conservative parties made it clear to the electorate that they understood all the issues involved in a CPO and would support a CPO indemnity partnership with RIC. However, in November 2015, six months after the UKIP administration took over at TDC, it decided against proceeding on a CPO with RIC. In January 2016 RIC decided to proceed by way of an application for a DCO and transferred its interest in the DCO process to the Applicant later in 2016.

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CA.1.12	The Applicant	**Reasonable Alternatives** DCLG Guidance related to procedures for the compulsory acquisition of land (2013) advises at paragraph 8 that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) should have been explored. **i. Provide details of any previous initiatives to purchase this site by yourselves or by any firms or bodies, including any by River Oak Investments from which you have accepted all responsibilities.** **Ii. Set out the reasons why any initiatives referenced were not successful.**
		Applicant's Response: i. The Applicant's predecessor, RIC, attempted to purchase the property from Highland Global Transport Limited, a company controlled by Ann Gloag. This was prior to the airport's acquisition by Stone Hill Park Limited (SHP) (dealings with SHP are covered in CA.1.16). In the period spanning May 4, 2014 and May 15, 2014, RIC submitted 3 separate offers in writing to purchase the freehold of the airport to Ann Gloag. On May 4, RIC offered £5,000,000, on May 13th, RIC offered £6,000,000 and on May 15th, RIC offered what had been described by Mrs. Gloag as "the full asking price" of £7,000,000 and offered a quick completion with the minimum of due diligence. ii. All three offers were refused; no reasons were given.
CA.1.13	TDC	**Reasonable Alternatives** DCLG Guidance related to procedures for the compulsory acquisition of land (2013) advises at paragraph 8 that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) should have been explored.

Ref No.	Respondent	Question
		Provide details of any previous initiatives to seek the Compulsory Purchase of this site, including any by River Oak Investments, setting out the reasons why these were not successful and whether there remains the possibility of using this route again.
		Applicant's Response: Please refer to the answers to CA.1.11 and CA.1.12 above. After the second failed attempt to execute an Indemnity Partnership agreement with TDC, RIC sought advice from Bircham Dyson Bell (now BDB Pitmans) (BDB). BDB's view was that if the proposed project involved an increase in capability of 10,000 cargo ATMs per year then it constituted a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 and that it should be subject to an application for a DCO.
CA.1.14	The Applicant	**Risks or impediments** DCLG *Guidance related to procedures for the compulsory acquisition of land* (2013) advises at paragraph 19 that any potential risks or impediments to implementation of the scheme should have been properly managed. **Set out the track record of the Applicant in developing, constructing and managing nationally significant infrastructure projects, notably airports.**
		Applicant's Response: The directors of the Applicant have significant experience in acquiring, developing and managing airports, complex real estate transactions and company takeovers. The Applicant will remain the owner of the airport and its operating arm will be responsible for overseeing operations at the airport. As is customary for privately owned airports, however, the Applicant will outsource a number of functions to third

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		party professional firms. These will include firms that specialise in airport security, construction management, remote control tower management and other areas. The Applicant has appointed and is advised by a team with deep experience in developing, constructing and managing airports that handle freighter traffic. In terms of developing and constructing the airport, the Applicant relies on the expertise of RPS, Viscount Aviation, Northpoint, Wood and Osprey Aviation. Capability statements are provided for these companies at Appendix CA.1.14 in TR020002/D3/FWQ/Appendices. If the DCO is granted the operating arm of the Applicant will appoint appropriate experts to manage the operations of the airport. The airport operator will have to obtain an Aerodrome Licence from the CAA which can only be obtained through the engagement of suitably qualified and experienced personnel (SQEP) at all levels of the Airport's operational management. It is the responsibility of the CAA to ensure that the holders of an Aerodrome Licence are financially and operationally competent and suitable persons to exercise the privileges of that licence.
CA.1.15	The Applicant	**Risks or impediments** DCLG *Guidance related to procedures for the compulsory acquisition of land* (2013) advises at paragraph 19 that any potential risks or impediments to implementation of the scheme should have been properly managed. **i. Explain whether the process of obtaining Air Space Change approval from the CAA should be regarded as a risk or impediment to the implementation of the scheme** **ii. Explain whether the process of obtaining an Airdrome Certificate from the CAA should be regarded as a risk or impediment to the implementation of the scheme** **iii. Explain whether the process of obtaining an environmental permit for the Pegwell Bay outfall should be regarded as a risk or impediment to the implementation of the scheme**

Ref No.	Respondent	Question
		Applicant's Response: i. The Applicant does not consider the process of obtaining Airspace Change approval from the CAA to be either a risk or impediment to implementation of the scheme. At the outset of this project the Applicant identified that the process associated with obtaining Airspace Change Approval from the CAA represents an additional and separate regulatory process which must be complied with. The Applicant has maintained close co-ordination with the CAA throughout the development of the Proposed Development to ensure that the DCO submission remains within the bounds of the CAA's regulatory requirements. This included facilitating a joint CAA/PINS Process Workshop where the respective roles, responsibilities and accountabilities of the two entities were agreed. It was also accepted that an Airspace Change Approval would not be granted if it went beyond the bounds of the DCO approval; indeed, the Applicant would not submit such a proposal. The Applicant has engaged a specialist aviation consultancy, Osprey CSL (Osprey), which not only has extensive experience of the airspace change process and regulations but equally whose staff have previously filled regulatory roles within the CAA. Their advice to date is that there is no reason why it should not be possible to secure the relevant authorisation from the CAA. Therefore, while there remain two separate regulatory paths to be followed regarding the DCO application and the airspace change, the Applicant is satisfied that it has co-ordinated its completion to such an extent that it does not represent either a risk or impediment to the implementation of the Proposed Development. Indeed, as the DCO and airspace change processes consider similar issues from different perspectives, the Applicant believes that alignment of the two processes should give the ExA reassurance in the level of scrutiny the proposal will ultimately receive. ii. The Applicant does not consider the process of obtaining an Aerodrome Certificate from the CAA to be either a risk or impediment to implementation of the scheme. As described in response to question i above, at the outset of the project the Applicant recognised that the process of obtaining an Aerodrome Certificate represents an additional and separate regulatory process which must be complied with.

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		The Aerodrome Certification process and the DCO process are distinct in nature but consider similar issues. Through close coordination with the CAA and facilitation of the CAA/PINS Process Workshop, the Applicant has ensured that the two processes are not only aligned but complementary to each other. Osprey are currently applying a virtually identical process to obtain an Aerodrome Licence on behalf of the Welsh Government with regard to St Athan aerodrome. Based on guidance from the CAA, the application for Aerodrome Certification will not be submitted until all aspects of the operation have been identified; this is likely to be after the DCO decision has been made. However, work on building the extensive body of evidence required to support the submission has already begun. The Aerodrome Certificate application to the CAA will remain within the bounds of the DCO submission. Once again the Applicant believes that, the Applicant's alignment of the Aerodrome Certificate and DCO processes should provide the ExA with assurance that the operation of Manston as a commercial airport will receive detailed scrutiny by the aviation regulator. iii. The Environment Agency (EA) has confirmed that an Environmental Permit (EP) is not required because the discharge will be of clean surface water. In addition, the EA and lead local flood authority have both indicated their agreement to the drainage strategy including the discharge to Pegwell Bay. The Appropriate Assessment has also concluded that there will be no adverse effect from the use of the outfall. As an EP is not required, the process of obtaining an EP is not a risk or impediment to the implementation of the scheme.
CA.1.16	The Applicant	**Acquiring by voluntary agreement** DCLG *Guidance related to procedures for the compulsory acquisition of land* (2013) advises at paragraph 25 that, as a general rule, authority to acquire land compulsorily should only be sought as part of an order granting development consent if attempts to acquire by agreement fail. **i. Set out the nature, timing and outcomes of any negotiations held with Stone Hill Park Ltd and/or their agents in respect of the purchase of land and/or rights a) before 17 July 2018 and b) to date.**

Ref No.	Respondent	Question
		ii. Set out an evaluation of the current probability of acquiring land and/or rights by agreement.
		Applicant's Response: i. A written offer was made to Stone Hill Park (SHP) through a letter to SHP's then lawyers, Herbert Smith Freehills on 6 June 2016. The offer was for £10,000,000. The offer was rejected and there was no counter-offer. There have been sporadic exchanges between the Applicant and SHP principals and their respective surveyors, CBRE and GVA, since June 2016, most recently on 8 February 2019. ii. The Applicant is unable to evaluate the probability of acquiring the land by agreement but remains willing to achieve this.
CA.1.17	Stone Hill Park Ltd	**Acquiring by voluntary agreement** DCLG ***Guidance related to procedures for the compulsory acquisition of land*** (2013) advises at paragraph 25 that, as a general rule, authority to acquire land compulsorily should only be sought as part of an order granting development consent if attempts to acquire by agreement fail. **i. Set out the nature, timing and outcomes of any negotiations held with the Applicant and/or their agents in respect of the purchase of land and/or rights a) before 17 July 2018 and b) to date** **ii. Set out an evaluation of the current probability of acquiring land and/or rights by agreement.**
		Applicant's Response: N/A

Ref No.	Respondent	Question
CA.1.18	Stone Hill Park Ltd	**Acquisition by voluntary agreement** Paragraph 8.37 of the Statement of Reasons [APP-012] states that: **"**Most of the land within the existing airport perimeter is owned by Stone Hill Park Limited, who have been unwilling to date to enter into meaningful negotiations with RiverOak, despite RiverOak's attempts to acquire this land by agreement.**"** **Comment on the Applicant's assertion that Stone Hill Park Limited have been unwilling to date to enter into meaningful negotiations with RiverOak.**
		Applicant's Response: N/A
CA.1.19	The Applicant	**Acquisition by voluntary agreement** Paragraph 9.19 of the Statement of Reasons [APP-012] states that: "RiverOak has already acquired some land and rights in land and will continue to seek to acquire all land and rights it needs by voluntary agreement, subject to the DCO being made." **Are those plots of land where land or rights were acquired prior to the application for a DCO being made still subject to the request for Compulsory Acquisition and contained in the Book of Reference?**
		Applicant's Response:

Ref No.	Respondent	Question
		Where the Applicant has acquired land or rights by voluntary agreement prior to the application (and during the period since), the land will still be subject to the request for compulsory acquisition powers and is contained in the Book of Reference [APP-014], and in the updated version being provided for Deadline 3 [TR020002/D3/3.3]. The Applicant has provided its justification for doing so in the Statement of Reasons [APP-012] at paragraph 9.22 to 9.24 inclusive and at the Applicant's response to CA.1.3 above.
CA.1.20	The Applicant	**Jentex fuel facility** The ExA noted that it received apparently conflicting evidence at the Open Floor Hearing held on 11th January 2019 as to whether or not the site of the Jentex fuel facility had been acquired by the Applicant. **Clarify**
		Applicant's Response: The Applicant can confirm that the land contained in Plot Numbers 071, 072, 072a and 77 (being the Jentex Fuel Facility) was acquired by RiverOak Fuels Limited on 17 September 2018. RiverOak Fuels Limited is a wholly owned subsidiary of the Applicant. This freehold transfer was registered at Land Registry on 15 January 2019 and the Book of Reference has been updated accordingly. An updated version of the Book of Reference is being submitted for Deadline 3 [TR020002/D3/3.3]. A copy of the Title was provided at Deadline 1 (in TR020002/D1/Sub).
CA.1.21	The Applicant	**Operation Stack** The ExA notes that, at paragraph 12.18 of the Statement of Reasons [APP-012], you state, in relation to 'Operation Stack' that:

Ref No.	Respondent	Question
		"Following diligent inquiry RiverOak has received no evidence to suggest that any interest in land [by the Secretary of State for Transport] is still in being and there is no evidence that the Secretary of State for Transport is in occupation. RiverOak has therefore not pursued consent in accordance with Section 135 of the PA 2008 as these provisions are not applicable where no interest exists." **Set out a reasoned statement of your understanding of the position of the Secretary of State for Transport in relation to any interests that may be held under any of the Categories for any plot in the Book of Reference [APP-007].**
		Applicant's Response: The Applicant has relied upon its land referencers WSP to establish the identity of, and interests held by, any third parties within the Order Limits. WSP has applied the appropriate standard of diligent inquiry as required by the Planning Act 2008. The methodology used by WSP to conduct these inquiries is included in the Consultation Report at Appendix 20 [APP-077]. Following diligent inquiry the Applicant is not aware of any interests held by the Secretary of State for Transport under any of the Categories for any plot in the Book of Reference [APP-014].
CA.1.22	The Applicant	**Operation Stack** The ExA notes that, at paragraph 12.18 of the Statement of Reasons [APP-012], you state, in relation to 'Operation Stack' that: *"Following diligent inquiry RiverOak has received no evidence to suggest that any interest in land [by the Secretary of State for Transport] is still in being and there is no evidence that the Secretary of State for Transport is in occupation. RiverOak has therefore not pursued consent in accordance with Section 135 of the PA 2008 as these provisions are not applicable where no interest exists*."

Ref No.	Respondent	Question
		The ExA received evidence at the Hearing into the dDCO held on 10 January 2019 that the Highways Agency had a written agreement with Stone Hill Park that it could utilise land at Manston Airport in relation to Operations Stack or Brock or successor initiatives. **Given this, explain why the Highways Agency or the Department for Transport are not listed in the Book of Reference in this respect.**
		Applicant's Response: Following further diligent inquiry with Stone Hill Park Limited (SHP), and the evidence brought forth in the hearing into the dDCO held on 10 January 2019, the Applicant understands that a written agreement exists for the provision of parking services between SHP and the Secretary of State for Transport. SHP explained at the Issue Specific Hearing into the dDCO that this agreement was subject to a confidentiality clause. In this circumstance, the Applicant has not included the Secretary of State for Transport nor Highways England in the Book of Reference [APP-014] as a written agreement for the provision of services does not constitute an interest in land. For the same reason, as stated in the Statement of Reasons [APP-012] at paragraph 12.18, the Applicant has not pursued consent in accordance with Section 135 of the Planning Act 2008 as these provisions are not applicable where no interest exists.
CA.1.23	Stone Hill Park Ltd	**Operation Stack** The ExA notes that, at paragraph 12.18 of the Statement of Reasons [APP-012], the Applicant states, in relation to 'Operation Stack' that: *"Following diligent inquiry RiverOak has received no evidence to suggest that any interest in land [by the Secretary of State for Transport] is still in being and there is no evidence that the Secretary of State for Transport is in occupation."*

Ref No.	Respondent	Question
		Set out the nature of any agreement with the Secretary of State for Transport in respect of Operation Stack and other relevant operations, including in your response any reference to s44 and/or 57 of PA2008 that may be relevant.
		Applicant's Response: N/A
CA.1.24	Secretary of State for Transport	**Book of Reference: Affected persons** **Set out a reasoned statement of your understanding of the position of the Secretary of State for Transport in relation to any interests that may be held under any of the Categories for any plot in the Book of Reference [APP-007].**
		Applicant's Response: N/A
CA.1.25	The Highways Agency	**Book of Reference: Affected persons** **Set out a reasoned statement of your understanding of the position of the Highways Agency in relation to any interests that may be held under any of the Categories for any plot in the Book of Reference [APP-007].**
		Applicant's Response: N/A

Ref No.	Respondent	Question
CA.1.26	The Applicant	**Book of Reference: Affected persons** Paragraph 8.25 of the Statement of Reasons [APP-012] states in relation to the pipeline leading to the outfall at Pegwell Bay that: "... despite RiverOak's diligent inquiries, it has not been possible to ascertain the exact nature of rights or interests in land in respect of this pipeline." **State how this lack of certainty over ownership is to be overcome.**
		Applicant's Response: The Applicant has continued to liaise with landowners and statutory undertakers in respect of the underground pipeline and has tried to overcome the lack of certainty as to ownership. On 20 November 2017 the Applicant erected site notices in prominent locations along the route of the underground pipeline to correspond with locations where the land in which the pipeline is located is unregistered. This notice invited any persons with an interest in the land to come forward. The Applicant received no substantive responses. The notices remained in situ for a period of six weeks and were checked on a weekly basis. Further inquiries were raised with Southern Water Services Limited as they are the relevant water and wastewater service provider for East Kent. Southern Water replied on 29 November 2018 to confirm categorically that they do not have an interest in the pipeline. As stated in the Statement of Reasons [APP-012] at paragraph 8.27 the Applicant remains committed to permanently acquiring the subsoil in which the pipeline is located together with permanent rights of access. This would have the result

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		of harmonising the legal position and, if acquired by General Vesting Declaration, the Applicant would assume title to the ownership of pipeline comprised within the subsoil it acquires even if it is unable to discover the current owner of the pipeline. The Applicant remains committed to acquiring the subsoil by voluntary agreement and in this regard the Applicant has issued letters to progress negotiations in early 2018 and again in December 2018. A meeting was held at Cliffsend Village Hall on 11 January 2019 to discuss the proposal. The Applicant will continue to advise these persons of its willingness to reach agreement, during the course of examination. The Applicant has submitted a Compulsory Acquisition Status Report at Deadline 3 (reference TR020002/D3/CASR) which provides further specific details of the Applicant's approach to negotiations in respect of each Category 1 person to date.
CA.1.27	The Applicant	**Book of Reference: Category 3 Interests** The Statement of Reasons [APP-006, paragraphs 7.5 – 7.7] describes the process of defining the zone within which parties might be entitled to make a "*relevant claim*" as a Category 3 interest. **Indicate where in the application documentation the wider referencing zone referred to in paragraph 7.5.2 is shown.**
		Applicant's Response: The wider referencing zone was contained within a decibel contour applied with the intention of identifying those parties who would or might be entitled to make a relevant and sustainable claim under Part 1 of the Land Compensation Act 1973. This was established to be the 63dB daytime contour or the 55dB night-time contour (whichever is larger). This level is the level at which the Government recommends noise insulation. The daytime contour is shown in the Environmental Statement [APP-042 at Figure 12.6] and the night-time contour is shown at [APP-042 at Figure 12.7].
CA.1.28	The Applicant	**Book of Reference: Category 3 Interests**

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		Paragraph 7.6 of the Statement of Reasons [APP-012] states that: "With regards to the noise assessment, RiverOak ... have also taken advice from valuation consultants as to the decibel contour that a landowner could make a compensation claim. The result of this assessment was the creation of noise contour mapping." **Explain the role of valuation consultants in advising on the decibel contour that a landowner could make a compensation claim**
		Applicant's Response: The Applicant instructed CBRE, as valuation consultants, to advise on the threshold beyond which a compensation claim may become reasonably capable of substantiation. From their direct experience on other airport, highway and railway schemes CBRE were able to advise that the decibel contour to be applied in respect of claims under Part 1 of the Land Compensation Act 1973 should be the 63dB daytime contour or the 55dB night-time contour (whichever is larger). This level coincides with the level at which the Government recommends noise insulation. The Applicant's environmental consultants provided mapping of the land and properties surrounding Manston Airport within each of these contours. The daytime contour is shown in the Environmental Statement [APP-042 at Figure 12.6] and the night-time contour is shown at [APP-042 at Figure 12.7]. The Applicant's land referencers, WSP, then conducted diligent inquiry within these boundaries to identify Category 3 persons in the Book of Reference [APP-014].
CA.1.29	The Applicant	**Book of Reference: Category 3 Interests** Paragraph 7.5.2 refers to the possible effects from vibration, smell, fumes, smoke, artificial lighting and discharge and in relation to s10 of the Compulsory Purchase Act 1965. Paragraphs 7.5 and 7.7 refer solely to the drawing of a boundary in terms of noise.

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		Explain your methodology and rationale for drawing limits in terms of: **i. factors under Part 1 of the Land Compensation Act 1973 (with special, but not sole, reference to s1 (5) of that Act);** **ii. the provisions of s152(3) of the 2008 Planning Act; and** **iii. injurious affection under s10 of the Compulsory Purchase Act 1965.**
		Applicant's Response: i. The Applicant sought the advice of CBRE, as valuation consultants, to advise on the threshold at which parties would or might be entitled to make a potential claim under Part 1 of the Land Compensation Act 1973, Section 10 of the Compulsory Purchase Act 1965 and Section 152 of the Planning Act 2008. The methodology applied was to establish a wider referencing zone that could identify areas in which the impact of the scheme may give rise to relevant and sustainable claims for compensation. Section 1 of the Land Compensation Act 1973 provides that the physical factors which may give rise to a claim under Part 1 are noise, vibration, smell, fumes, smoke, artificial lighting and discharge. The Applicant determined that, as the greatest potential impact from the operation of the airport would be noise, a wider referencing area should be established by reference to principally this factor as it would encompass relevant claimants with regard to the other, remaining factors listed at Section 1 of the Land Compensation Act 1973. The noise threshold applied was the 63dB daytime contour or the 55dB night-time contour (whichever is larger) and the rationale for this threshold level being used was that it is evidenced as the level at which the Government recommends noise insulation in the Aviation Policy Framework 2013. The Applicant was advised that this referencing zone would sufficiently identify parties who would or might be entitled to make a potential claim under Part 1 of the Land Compensation Act 1973 in respect of any of the physical factors listed under Section 1 of the Land Compensation Act 1973, i.e. that all properties affected by the factors other than noise would be

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		contained within the identified noise contour. However, this wider referencing area does not establish which compensation claims may or may not be successful, if any. ii. and iii. Compensation claims under Section 10 of the Compulsory Purchase Act 1965 in respect of the execution of works are extremely difficult, if not impossible, to anticipate. The Applicant was advised that, in terms of methodology and rationale, it would be reasonable to rely upon the wider referencing area already established for potential claims under Part 1 of the Land Compensation Act 1973 as this incorporated an extensive area of land and number of properties. In other words properties where a compensation claim might be substantiated as a result of the execution of the works would be contained within the identified noise contour that has been referenced for the operation of the works under Part 1 of the Land Compensation Act 1973. Section 152 of the Planning Act 2008 is intended to provide recourse to any claimant where an injurious affection claim would be limited by a defence of statutory authority by the grant of the DCO. The same principle, in terms of relying upon the wider referencing area established for potential claims under Part 1 of the Land Compensation Act 1973, applies in those cases as such claims are extremely difficult to anticipate. The Book of Reference [APP-014] at Part 2 does not seek to distinguish between the parties who would or might be entitled to make a potential claim under Part 1 of the Land Compensation Act 1973, Section 10 of the Compulsory Purchase Act 1965 or Section 152 of the Planning Act 2008. The Applicant does not believe that it would be appropriate to do so as this predicts the heads of claim, if any, under which those persons may seek to make a claim. This is not a requirement of the legislation nor relevant guidance on these matters. The Applicant notes that the limits of the wider referencing area does not prohibit parties from outside of this area from seeking to make a claim for compensation. However, the Applicant believes that its methodology is sufficiently robust to have identified those parties that it is required to under the provisions of Section 44 of the Planning Act 2008.
CA.1.30	The Applicant	**Restrictive Covenants**

Ref No.	Respondent	Question
		Article 22 of the dDCO [APP-006] allows for the imposition of restrictive covenants. **i. Provide a draft copy of any Restrictive Covenant to be imposed under this Article.** **ii. Set out the circumstances in which a Restrictive Covenant may be imposed.** **iii. Demonstrate the need for a Restrictive Covenant to be imposed.** **iv. State whether and how the text of any possible Restrictive Covenant will be embedded in, or secured through the dDCO, providing justification if it is not to be.**
		Applicant's Response: i. The Applicant considers that it is impractical to provide the drafting of restrictive covenants at this stage (and would mean a level of detail in this DCO examination unlike any other) as the drafting of each covenant would be specific to the plot concerned. ii. A restrictive covenant enables the Applicant to apply limited control over the use of land without resorting to compulsory acquisition of that land. Without the power to impose restrictive covenants full compulsory acquisition might be necessary even when only a minor restriction over land is required for the purposes of the Proposed Development. The power to impose restrictive covenants therefore reduces the impact on affected landowners. iii. The Applicant anticipates that restrictive covenants may be required in relation to the drainage pipeline that runs between the main airport site and Pegwell Bay. Acquisition of this pipeline is to be limited to subsoil acquisition and access rights. This will reduce the area of outright acquisition to the benefit of the landowners (as the effect on their landowning is reduced). The Applicant may have to impose restrictive covenants on adjoining landowners to ensure that the pipeline is protected and access retained.

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		iv. It is not appropriate for text of a restrictive covenant to be embedded in or secured through the DCO as the drafting will be specific to any given plot. There may therefore be multiple forms of restriction. The type of restriction required will also not become apparent until a contractor is appointed to maintain the pipeline. It is for this reason that there is no precedent for the inclusion of the text of a restrictive covenant within a development consent order.
CA.1.31	The Applicant	**Temporary stopping up and restriction of use of streets** Article 12 - Temporary stopping up and restriction of use of streets - of the draft DCO [APP-006] provides for the use any such street as a temporary working site (para. 5.9.2 of the Statement of Reasons [APP-012]). **State whether it is your intention to temporarily stop up streets solely for the purpose of using them as a temporary working site.**
		Applicant's Response: No specific work activity is planned which will require use of this power. However the Applicant considers that this power may be required and therefore it is included in the dDCO [APP-006]. One example in which this may be required is if the new constructed highways in the Northern Grass area are adopted in the initial phase of development, it is feasible that a street created as part of this initial development may be adopted and then stopped up to provide a temporary working site for construction of the Northern Grass buildings, The Applicant therefore proposes to keep this power within the dDCO.
CA.1.32	The Applicant	**Statutory Undertakers**

Ref No.	Respondent	Question
		The Applicant and Affected parties should note that, where a representation is made under section 127 of the 2008 Act and has not been withdrawn, the Secretary of State will be unable to authorise Article 31 unless satisfied of specified matters in Section 127. **Provide a schedule of all Statutory Undertakers referenced in the Book of Reference showing whether a representation under s127 of PA2008 has been made, the stage at which negotiations leading to a possible removal of that objection and the currently forecast likely outcome.**
		Applicant's Response: Please see Appendix CA.1.32 in document TR020002/D3/FWQ/Appendices.
CA.1.33	The Applicant	**Statutory Undertakers** The Relevant Representation [RR-0544] by Eversheds Sutherland (International) LLP on behalf of Network Rail states that there have been no formal request to Network Rail and requests the Promoter enters into discussions with Network Rail as soon as possible to seek to agree the necessary rights required for the DCO Scheme. **Explain why discussions had not been entered into in advance of the application having been made.** **NOTE**: Both parties should note that the issue of Protective Provisions has been examined in general terms at the ISH on the dDCO held on 10 January 2019.
		Applicant's Response: The Applicant first wrote to Network Rail on 19 February 2018 stating its willingness to discuss the form of protective provisions to be included in the dDCO.

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		The Applicant maintained correspondence with Network Rail, including corresponding with Network Rail's surveyor prior to the submission of the DCO application. Since September 2018 the Applicant has engaged with Network Rail's appointed legal advisers. On 18 January 2019 the Applicant received a draft framework agreement from Network Rail which it is considering. It is hoped that the discussions will result in agreement as to the appropriate form of protective provisions to be given to Network Rail.
CA.1.34	The Applicant	**Statutory Undertakers** The Relevant Representation [RR-0544] by Eversheds Sutherland (International) LLP on behalf of Network Rail states that *"...at present Network Rail objects to the draft Order on the basis that it does not include Network Rail's standard protective provisions."* **State whether you are willing to include Network Rail's standard protective provisions in a Protective Provision.** **NOTE**: Both parties should note that the issue of Protective Provisions has been examined at the ISH on the dDCO held on 10 January 2019.
		Applicant's Response: The Applicant is in discussions with Network Rail on the form of protective provisions to be offered to Network Rail. The Applicant does not consider that it is necessary to include Network Rail's standard protective provisions in the dDCO [**APP-006**]. The initial statement of common ground with Network Rail (**TR020002/D3/SOCG/NR**) provides further information concerning the Applicant's position in relation to the need for protective provisions.

Ref No.	Respondent	Question
CA.1.35	The Applicant	**Relevant Representations** – **Affected Persons** The Relevant Representation from Savills on behalf of the College of St John the Evangelist, the University of Cambridge [RR-0348] states that at this stage there have been no details provided with regards to what new structures are required and what restrictions there will with regards to farming the land adjacent to these. **i. Explain why the College of St John the Evangelist had not been party to discussions on this in advance of the application being made.** **ii. State what, if any, negotiation has taken place since the date of the RR from the College of St John the Evangelist.** **iii. Set out details with regards to what new structures are required and what restrictions there will with regards to farming the land adjacent to these.**
		Applicant's Response: i. The Applicant corresponded with the College of St John the Evangelist by letter on 9 February 2018 seeking to progress commercial negotiations. On 23 February 2018, Savills on behalf of the College informed the Applicant that the College did not wish to engage in any discussions or negotiations with the Applicant prior to the determination of the DCO. ii. Whilst noting this response, the Applicant has continued to correspond and seek to progress negotiations making further contact by letter and email on 21 September 2018. No substantive response has been received. The Applicant will continue to seek to liaise with the College to try to progress negotiations with them. iii. There will be a requirement to install new CAT III approach lights in the 900 metres preceding the runway threshold. The light installations will consist of new pole mounted lights along with pit and duct infrastructure to provide an electrical connection to these. The Applicant would seek to impose proportionate restrictive covenants on the land to secure and protect the integrity of its installations and the continued, safe operation of the runway. This would include restricting crop

Ref No.	Respondent	Question
		height and other impediments to the view of the landing lights for approaching aircraft. It would be the Applicant's preference to discuss the extent of such restrictive covenants with the College of St John the Evangelist at such time as they engage in commercial negotiations with the Applicant.
CA.1.36	The Applicant	**Relevant Representations** – **Affected Persons** The Relevant Representation from Defence Infrastructure Organisation Safeguarding [RR-0442] states that: *"...we have consistently raised concerns to this application due to no successful mitigation being identified."* **i. Explain why Defence Infrastructure Organisation Safeguarding had not been party to discussions on this in advance of the application being made.** **ii. State what, if any, negotiation has taken place since the date of the RR from Defence Infrastructure Organisation Safeguarding.** **iii. Set out what mitigation being identified in this respect.** **NOTE**: This question may be answered through the provision of a Statement of Common Ground (SoCG) as requested through the ExA's Rule 6 letter dated 11 December 2019
		Applicant's Response: i. The Defence Infrastructure Organisation Safeguarding (DIO), which is a part of the Ministry of Defence (MoD) has been party to discussions with the Applicant prior to the application submission. Discussions between the Applicant and the DIO have been ongoing since 3 January 2017.

Ref No.	Respondent	Question
		ii. The DIO submitted an RR which was received by the Inspectorate on 7 September 2018 (examination library ref RR-0442). Since the DIO submitted its RR the Applicant has continued its discussions with the DIO, and in particular a meeting took place on 18 October 2018 between the Applicant, the MoD and the DIO to discuss to discuss the Applicant's proposals. iii. The mitigation measures identified in respect of the High Resolution Direction Finder (HRDF) are that, subject to DIO agreement, the Applicant proposed to secure an appropriate site (outside the development 'red line') to build and test a new HRDF installation to the satisfaction of DIO, before the current installation is decommissioned. The Applicant's intention is to provide an equivalent level of capability, at no cost to DIO, and with no break in service. The Applicant has commissioned a detailed safeguarding assessment of both the current installation and up to five alternative locations both on and off the airfield which it has shared with DIO. As a result the Applicant has identified an alternative location which, assessments indicate, would give at least the same level of capability provided by the current location. The Applicant has reached agreement with the landowner of a site it considers would be suitable to accommodate this facility. It is adjacent to the land which will accommodate the approach lights in respect of which the Applicant has a 25 year lease with the same landowner. It was agreed by the Applicant and DIO, at a meeting on 18 October 2018, that there is a need for a technical assessment of the proposed new location by a third party organisation (Aquila) on behalf of the MoD to confirm the level of capability that the new site would provide. The Applicant believes the new site to be acceptable and in some respects better than the current location (e.g. fewer nearby structures).
CA.1.37	The Applicant	**Relevant Representations** – **Affected Persons** The Relevant Representation from Defence Infrastructure Organisation Safeguarding [RR-0442] states that: "*...the Ministry of Defence has a number of freehold interests within the DCO boundaries (including the equipment referred to above) as well as a significant number of other legal interests for which no agreement has been reached as to how these will be dealt with*." **i. Has the Ministry of Defence been party to discussions on this in advance of the application being made?**

Ref No.	Respondent	Question
		ii. State what, if any, negotiation has taken place on this issue since the date of the RR from Defence Infrastructure Organisation Safeguarding. **iii. Set out what agreements have been reached on this issue.** **NOTE**: This question may be answered through the provision of a SoCG as requested through the ExA's Rule 6 letter dated 11 January 2019
		Applicant's Response: i. Yes, the Ministry of Defence (MoD) was party to discussions with the Applicant prior to the application submission. The Applicant and the MoD have been in discussions in relation to the Proposed Development since May 2017. There have been ongoing discussions with the MoD since that date. Representatives of the MoD attended a meeting with the Applicant on 14 March 2018 to discuss the relocation of the High Resolution Direction Finder. As agreed at that meeting, the Applicant prepared a draft Statement of Common Ground which was sent to the MoD on 19 June 2018. The MoD and the Applicant are in discussion about the Statement of Common Ground and hope to provide an agreed version by Deadline 4. ii. The Defence Infrastructure Organisation (DIO) submitted an RR which was received by the Inspectorate on 7 September 2018. Since the DIO submitted its RR the Applicant has continued its discussions with the MoD and DIO. On 18 October 2018 a meeting took place between the Applicant, DIO and MoD to discuss the Applicant's proposals. Furthermore, the Applicant contacted the MoD on 30 November 2018 to provide copies of the Land Registry title documents relating to MoD interests affected by the Proposed Development. iii. The issues which have been agreed between the Applicant and the MoD to date will be set out in a Statement of Common Ground which the Applicant hopes to provide for Deadline 4.
CA.1.38	The Applicant	**Relevant Representations** – **Affected Persons**

Ref No.	Respondent	Question
		The Relevant Representation from NATS [RR-1407] states that NATS relies on critical infrastructure. The ExA notes that NATS is not referenced in the Book of Reference [APP-014] and is not subject of draft Protective Provisions in the dDCO [APP-006]. **Comment?**
		Applicant's Response: The Applicant has relied upon its land referencers WSP to establish the identity of, and interests held by, any third parties within the Order Limits. WSP has applied the appropriate standard of diligent inquiry as required by the Planning Act 2008. The methodology used by WSP to conduct these inquiries is included in the Consultation Report at Appendix 20 [APP-077]. Following diligent inquiry the Applicant did not identify NATS as a party with an interest in land contained within the Order Limits. On 23 January 2019 following an additional query, NATS confirmed that it does not have an interest in the land and its infrastructure is contained within the Secretary of State for Defence's ownership (in the case of the High Resolution Direction Finder, within plot number 041).
CA.1.39	The Applicant	**Relevant Representations** – **Affected Persons** The Relevant Representation from Southern Gas Networks PLC [RR-1833] requests details of arrangements made by RiverOak, with a view to ensuring that the Gas Infrastructure is protected during the implementation of the Works. **i. Explain why Southern Gas Networks PLC had not been party to discussions on this in advance of the application being made.** **ii. State what, if any, negotiation has taken place since the date of the RR from Southern Gas Networks PLC.**

Ref No.	Respondent	Question
		iii. Set out what specific arrangements have been made by RiverOak, with a view to ensuring that the Gas Infrastructure is protected during the implementation of the Works. **NOTE**: This question may be answered through the provision of a SoCG as requested through the ExA's Rule 6 letter dated 11 December 2019
		Applicant's Response: i. Southern Gas Networks PLC (SGN) was party to discussions with the Applicant in advance of the application being made. SGN responded to the Applicant's section 42 consultation which took place in early 2018. The Applicant commenced direct discussions with SGN upon receipt of SGN's consultation response in early February 2018. Specifically, the Applicant wrote to SGN on 9 February 2018 enclosing a draft of the protective provisions it proposed to include in the draft development consent order to be submitted with the application. ii. SGN submitted an RR which was received by the Inspectorate on 20 September 2018 (ref RR-1833). Since SGN submitted its RR the Applicant has continued its discussions with SGN and its representatives to discuss necessary protections for SGN's apparatus in the area. These discussions have included the following: • 25 September 2018 – email from CMS (SGN's external lawyers) - re protective provisions and requesting undertaking of costs; • 26 September 2018 - email from the Applicant's legal advisors, Bircham Dyson Bell (now BDB Pitmans) (BDB) to CMS – confirmation of receipt; • 11 October 2018 - email exchanges between BDB and CMS - undertaking for costs provided; • 29 October 2018 - email exchanges between CMS and BDB - CMS provide draft protective provisions SGN require; • 28 November 2018 - email from CMS to BDB – seeking update; • 12 December 2018 – email from BDB to CMS – provides the Applicant's response to the draft protective provisions SGN requested;

Ref No.	Respondent	Question
		• 18 December 2018 – email from CMS to BDB - provides response to the Applicant's comments on the protective provisions SGN requested; • 8 January 2019 - email from BDB to CMS – noting the Applicant's comments to follow; • 22 January 2019 - email from BDB to CMS – noting the Applicant's comments to follow iii. Details of the parties' positions in relation to arrangements for protecting SGN's apparatus in the area is set out in a Statement of Common Ground which is being submitted for Deadline 3 (TR020002/D3/SOCG/SGN).
CA.1.40	The Applicant	**Crown Land** **Provide a position report on engagement with the affected Crown bodies affected by the request for the acquisition of land and/or rights subsequent to 17 July 2018 including outcomes of that engagement.**
		Applicant's Response: Since 17 July 2018 the Applicant has continued to liaise with the affected Crown bodies as follows: <u>Secretary of State for Defence</u> • Between August and February 2019 the Applicant's solicitors and the Ministry of Defence Principal Estate Surveyor and Estate Surveyor have maintained regular email contact regarding the Applicant's request to acquire land and/or rights. • A meeting was held on 18 October 2018 between the Applicant, the Ministry of Defence and the Defence Infrastructure Organisation to discuss Crown Land and the relocation of the High Resolution Direction Finder (HRDF). • Since the meeting in October 2018 until present, various emails have been sent by the Applicant's solicitors to the Ministry of Defence in order to progress negotiations.

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		Secretary of State for Housing Communities and Local Government / Met Office • Between August and January 2019 the Applicant's solicitors and the Met Office Regional Network Manager have maintained regular email contact regarding the Applicant's request to acquire land and/or rights. • A teleconference was held on 23 October 2018 with the Applicant's solicitors, the Applicant's engineering consultants and the Met Office Regional Network Manager. • On 23 October 2018 the Met Office confirmed that it would be responsible for reaching agreement and seeking consent under Section 135 of the Planning Act 2008 and all contact with the Secretary of State for Housing Communities and Local Government should be via them. • A Statement of Common Ground has been drafted and is at an advanced stage of negotiation. It is anticipated that this will be agreed shortly and the Applicant will advise the ExA accordingly. Bona Vacantia • In August 2018 the Applicant's solicitors and the Bona Vacantia Division Legal Group maintained regular email contact. • On 30 August 2018 the Bona Vacantia Division representative confirmed that Plot Numbers 019c and 050b contain interests over which the Division have established jurisdiction. The representative advised that these assets are vested in Bona Vacantia but that no decision has been taken on how to proceed. The Applicant proposes to make no change to the Book of Reference in this regard but will maintain regular contact with the Bona Vacantia Division during the course of examination, should circumstances change. • Between September 2018 and February 2019, the Applicant's solicitors have regularly sent emails to and left messages with the Bona Vacantia Division Legal Group requesting that contact is made in relation to progressing negotiations. • On 6 February 2019, the Bona Vacantia Division representative confirmed that they are unlikely to have a definitive decision by Deadline 3 of the Rule 8 letter on how to proceed with the assets, and that they are still awaiting a response from the Department for Transport.

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CA.1.41	The Applicant	**Special Category Land** Part 5 of The Book of Reference [APP-007] lists four plots described as being Special Category Land. These are plots 185b, 185c, 185d, 185f. These are described as being 'Open Space' and the Land Plans [APP-016] show 'Acquisition of permanent rights over land' for these plots. The ExA notes that these plots relate to a pipeline running diagonally under these plots. **i. Justify the extent of this land.** **ii. Justify the need for the acquisition of permanent rights.**
		Applicant's Response: i. The Applicant has sought to limit the extent of land over which compulsory acquisition powers are sought in respect of the underground pipeline to the minimum necessary by reference to the existing infrastructure and rights of way only in locations where it will be necessary for the Applicant to maintain and operate the pipeline. The diagonal route corresponds with the location of the existing underground pipeline. RPS, on behalf of the Applicant, undertook a pipeline condition survey to determine the suitability of the pipeline for use. The pipeline route was established by a combination of the results of this condition survey, GPS survey of existing manholes and by reference to historical plans for buried manholes, where available. The pipe varies in size along the route length but is typically one metre in width. The extent of land over which compulsory acquisition powers are sought allows for the variations in size and its orientation / surroundings. ii. The Applicant has sought powers of compulsory acquisition as, following diligent inquiry, it has not been possible to identify the owner of the pipeline. The subsoil in which the pipeline is located is nominally owned by the surface landowners along the entire route however they do not take any active role in operating or maintaining the asset. Therefore there are no

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		associated rights of access benefiting the underground pipeline and the Applicant is seeking compulsory powers to acquire the stratum of subsoil that includes the pipe and permanent rights over the land contained within Plots 185b, 185c, 185d and 185f to utilise the existing pipeline in this location and an existing manhole cover. As explained at CA.1.26 above the Applicant is seeking to harmonise the legal position as to ownership by including the pipeline in the application.
CA.1.42	The Applicant KCC TDC Nemo Link Ltd Stone Hill Park Ltd	**Special Category Land** The ExA is minded to recommend that the circumstances set out in s131(4) or 132(4) related to replacement land; 131(5) or 132(5) relating to area, or use and necessity of replacement land; 131(4A) or 132(4A) relating to availability of replacement land and public interest for a speeded procedure; or 131(4B) or 132(4B) relating to acquisition for a temporary purpose do not apply in relation to plots 185b, 185c, 185d, 185f. **Show any evidence to the contrary.**
		Applicant's Response: The Applicant agrees that the circumstances set out in these sections do not apply in relation to plots 185b, 185c, 185d, 185f. The Applicant's case is that section 132(3) applies to the plots in question (see response to CA.1.43 below).
CA.1.43	KCC TDC Nemo Link Ltd Stone Hill Park Ltd	**Special Category Land** PA2008 s132(3) states that this subsection applies if order land, when burdened with the order right, will be no less advantageous than it was before to the persons in whom it is vested, other persons, if any, entitled to rights of common or other rights, and the public. **Set out your reasoned opinion as to whether this subsection is fulfilled in the case of the Special Category Land at plots 185b, 185c, 185d, 185f**.

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	and All parties	Applicant's Response: The Applicant is seeking access over these four plots of land as a right of way from the nearest public highway for the purposes of maintaining the underground pipeline leading from the airport site to Pegwell Bay. These parcels are considered to be open space and are shown as such on the Special Category Land Plan (APP-019). The Applicant's position is that the land will be no less advantageous to those persons entitled to rights of common or other rights over the land and the general public because the Applicant would simply require infrequent access (of the order of once a year) on what is mainly already an established right of way used by others. The Applicant is only seeking to acquire land below the surface where the existing underground pipeline is located, which will have no effect on its use at the surface, and is only seeking to acquire a right of vehicular access from the nearest public highway at surface level along a route that is already a public right of way for most of its length (save for the last 25m), for maintenance of the pipeline. These powers, if exercised, would not interfere with the existing recreational use of the land and the public will be able to continue to access the land as currently. The land's status as open space would not be prejudiced.
CC.1 Climate Change		
CC.1.1	The Applicant	**UK Climate Projections** Detailed consideration must be given to the range of potential impacts of climate change using the latest UK Climate Projections available at the time, and to ensuring any Environmental Statement (ES) that is prepared identifies appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure. A new set of UK Climate Projections have become available after the preparation of the ES. The next generation of UK climate projections, UKCP18, was released in November 2018.

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		Provide an assessment of how this next generation of UK climate projections would affect the conclusions of Chapter 16 of the ES [APP-034].
		Applicant's Response: The new generation of UK climate projections would not affect the conclusions of Chapter 16 of the Environmental Statement (ES) [APP-034]. The new generation of UK climate change projections for the UK, UKCP18, was released between the submission of the ES and the beginning of the DCO examination. The predecessor of UKCP18, UKCP09, was used to complete a preliminary climate change impact assessment during the development of the ES but was not developed into a full assessment for Chapter 16. The rationale for this is given in paragraph 16.5.5 of the ES [APP-034], which is still valid. UKCP18 provides a new set of projections and tools to consider climate change impacts in risk assessments and adaptation plans. However, the trends and key messages in UKCP18 are largely consistent with those in UKCP09. UKCP18 will be used to update the climate change risk assessment post-DCO approval, should consent be granted, which will in-turn inform the development of the Climate Change Adaptation Strategy (see Question CC.1.3). Given that a detailed examination using UKCP09 was not deemed necessary for Chapter 16 of the ES [APP-034], there will be no change to the conclusions of the chapter.
CC.1.2	The Applicant	**Climate Change Assessment Chapter 16 of ES [APP-034]** **Demonstrate that there are no critical features of infrastructure design which may be seriously affected by more radical changes to the climate beyond those projected in the latest set of UK Climate Projections ie UKCP18.**
		Applicant's Response:

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		Given the level of design, the relevant impacts that need to consider more radical changes in climate all relate to flooding. High-end but still plausible climate change projections, known as H++ scenarios, have been developed by the Met Office to sensitivity test for climate change impacts (see Appendix CC.1.2 in TR020002/D3/FWQ/Appendices). There is no flood risk from rivers on site, so using the H++ scenario of 120% uplift in flows does not increase risk to infrastructure design or receptors. There are no H++ scenarios for surface water flooding so this has not been tested. However, the infiltration capacity of the underlying chalk and the elevation of the site above rivers means the risk remains very low. The drainage strategy is to discharge surface water to sea, and the proposed drainage strategy addresses any potential issues associated with surface flooding Given the elevation of the site (~54m), the Proposed Development site is not at threat of sea level rise even in radical changes to the climate beyond those in UKCP18. The H++ scenario for sea level rise across the UK is 1.9m. Given the steep fall from the site to Pegwell Bay, and the large diameter of the pipe, there is no potential for the water drained from site to be backed up onto site or to have a limited flow into Pegwell Bay during storm surges with the increased sea levels. As stated in paragraph 16.5.5 of the ES [APP-034], a full assessment will be undertaken to inform a Climate Change Adaptation Strategy following DCO approval, when detailed design information is available. Radical changes in climate are being considered in the Climate Change Adaptation Strategy, a framework version for which will be provided at Deadline 4. The Climate Change Adaptation Strategy will be continually developed throughout detailed design stages post-DCO approval.
CC.1.3	The Applicant	**Climate Change Adaptation Section 16.5 and paragraph 16.6.7 of ES [APP-034]** **What is the current status of the Applicant's Climate Change Adaptation Strategy?**

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		Point to where in its Masterplan [APP-079] the Climate Change Adaptation Strategy features.
		Applicant's Response: i. The Applicant is continually developing its Climate Change Adaptation Strategy, a framework version of which will be provided at Deadline 4. A preliminary climate change impact assessment has been carried out using UKCP09, which was used to inform the climate change statements in the ES (APP-034). The assessment will be updated to use UKCP18 as the Climate Change Adaptation Strategy develops. A full version of the Climate Change Adaptation Strategy will be provided following DCO approval, as stated in paragraph 16.5.6 of the ES [APP-034]. The strategy ensures that climate change is embedded as a design principle throughout detailed design, construction and operation of the Proposed Development, and is of the correct level of detail for the stage of design. ii. Climate change was considered in the development of the Masterplan [APP-079]. Climate change allowances have been used in the development of the flood risk assessment and drainage design (see Table 8.14 in the ES [APP-033]), so are implicitly reflected in the Masterplan layout. Measures to build the resilience of Manston Airport for all other impacts will be continually embedded into the design process through the developing Climate Change Adaptation Strategy. Operational measures to ensure resilience are considered in the developing Climate Change Adaptation Strategy, a framework version of which will be provided at Deadline 4.
DCO.1 Draft Development Consent Order (DCO) **Annex D** to the Rule 6 letter (11 December 2018) provided notice of an Issue Specific Hearing (ISH) on the dDCO which was held on 10 January 2019 (ISH1). A detailed agenda posted on the National Infrastructure Planning website on 21 December 2018 (https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR020002/TR020002-002836-181221%20TR020002%20-%20detailed%20agenda%20for%20ISH1%20on%20dDCO.pdf) set out a schedule of issues and questions for examination at ISH1. The Examination Timetable provides that matters raised orally in response to that schedule are to be submitted in writing by **Deadline 1** (18 January 2019). Comments on any matters set out in those submissions are to be provided by **Deadline 2** (6 February). Interested Parties who participated in ISH1 and consider that their issues have already been drawn to the ExA's attention do not need to reiterate their issues in responses to the questions below. Interested Parties are requested to review the **Deadline 1** written submissions arising from ISH1 before		

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responding to the question below. Matters set out in **Deadline 1** written submissions arising from ISH1 are best responded to in **Deadline 2** comments rather than in responses to the following questions, which aim to capture matters that were not raised at ISH1.		
DCO.1.1	The Applicant	**Associated Development** The ExA note that We have noted that the Explanatory Memorandum [APP-007] states, at 2.10, that: *"• RiverOak has chosen not to differentiate the NSIP and associated development works in Schedule 1 to the Order*. It has further noted that the *NSIP Justification Document* [APP-008] does identify a list of works at para. 44 that: *"• are not part of the NSIP itself can be categorised as supporting the operation of the NSIP or addressing its impacts, and are therefore associated development*." It has further noted that there is no definition of 'associated development' in the dDCO [APP-006] Schedule 1, Article 2 but "*associated development*" is referred to in the definition of "*authorised development*" and in Schedule 1. With reference to the then Department for Communities and Local Government Planning Act 2008: Guidance on associated development applications for major infrastructure projects published in April 2013, **provide a reasoned note on Associated Development which applies your argument and reasoning in this respect to the Works as set out in the dDCO**.
		Applicant's Response: The Applicant has now made amendments in a revised dDCO which is submitted at Deadline 3 (TR020002/D3/2.1) so that the NSIP and associated development elements of the Proposed Development are differentiated in Schedule 1 and a definition of "associated development" is provided in article 2.

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DCO.1.2	Kent CC	**Article 12(2)** – **Temporary stopping up and restriction of use of streets** Article 12(2) in the draft DCO [APP-006] states that: *"...the undertaker may use any street temporarily stopped up or restricted under the powers conferred by this article and which is within the Order limits as a temporary working site..."* **Is KCC content with this Article?**
		Applicant's Response: N/A
DCO.1.3	The Applicant	**Article 13** – **Permanent stopping up of public rights of way** Article 13(2) deals with public rights of way and the use of a temporary alternative route before a new PROW is opened. **Comment on whether there should there be a commitment secured in the dDCO to setting a period by the end of which any permanent substitute public right of way has to be completed?**
		Applicant's Response: The Applicant does not consider such a time limit to be necessary. This power relates to a single right of way. Protection is provided to the users of the public right of way in that article 13(2)(b) of the dDCO [APP-006] states that the provision and maintenance of the temporary alternative route by the undertaker must be to the reasonable satisfaction of the street

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		authority. It is unlikely that the street authority will be satisfied with a route that is significantly less convenient to the users and the route itself must be maintained to a standard that meets with the street authority's satisfaction.
DCO.1.4	Kent CC	**Requirement 16** – **Archaeological remains** The ExA notes that the Relevant Representation from Kent County Council[RR- 0975] states that: *"a DCO requirement should cover the need to preserve the archaeology including through adjustment of development parameters as well as covering the necessary stages of evaluation and investigation. The requirements should also cover extensive investigation of those areas of the airport where archaeology will be affected by development but is not to be preserved in situ. The County Council welcomes the intention to agree a Written Scheme of Investigation for future archaeological investigations."* **Suggest any amendment to Requirement 16 that would satisfy the County Council in these respects.** **NOTE**: Kent CC may choose to answer this question in association with that at HE. 1.25.
		Applicant's Response: N/A
DCO.1.5	The Applicant	**Landscape - Planting scheme** Para 11.1.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that:

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		"Some fixed areas of planting are proposed, ... Elsewhere in the 'Northern Grass' area, planting will be introduced as part of the final layout of this area. However, this planting has not been defined within the broad zones to allow for future flexibility in the design." **Show where final scheme approval is secured in the draft DCO.**
		Applicant's Response: Requirement 10(1) provides that each part of the Proposed Development must be landscaped in accordance with a landscaping scheme which sets out details of all proposed hard and soft landscaping works and which has been submitted to and approved in writing by the Secretary of State, following consultation with the relevant planning authority on matters relating to its function. The revised dDCO submitted for Deadline 3 (TR020002/D3/2.1) has been amended to ensure that landscaping schemes are approved prior to commencement of the relevant part of the authorised development.
DCO.1.6	The Applicant	**Radar Tower** Para 11.3.6 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that one of the parameters for modelling potential visibility is a radar tower at a height of 27m AGL. **Show where this height is secured in Schedule 1 of the dDCO (APP-006]**
		Applicant's Response: The description of Work No.4 and article 6(1)(c) have been amended to refer to the height of this structure in the revised dDCO submitted for Deadline 3 (TR020002/D3/2.1).

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DCO.1.7	The Applicant	**Lighting** Table 11.11 in in Chapter 11 Landscape and Visual, in ES Volume 2 [APP-034] the sets out details of the lighting scheme for the airport and for the Northern Grass. **Show how is the lighting scheme secured in the draft DCO (APP-060]?**
		Applicant's Response: Requirement 4 in Schedule 2 of the dDCO submitted for Deadline 3 (TR020002/D3/2.1) has been amended so that details of lighting are included in the detailed design that must be submitted and approved by the Secretary of State prior to the commencement of any part of the authorised development. The Applicant will ensure that the commitments listed in Table 11.11 of the ES in respect of the lighting scheme will be included in the Register of Environmental Actions and Commitments (REAC) [APP-010] being submitted for Deadline 4 and through Requirement 6 (construction and environmental management plan) and Requirement 7 (operation environmental management plan) of the dDCO being submitted for Deadline 3 to ensure that the authorised development must be constructed, operated and maintained in accordance with the REAC including the lighting mitigation.
DCO.1.8	The Applicant	**Public Rights of Way** Paragraph 3.2.1 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073] states that: "KCC requested that PRoW are to be created and funded under a Section 106 Agreement and would be maintained by KCC while remaining part of Manston Airport land. It should be noted however, that the power to undertake any mitigation work required would be established under the powers of the DCO."

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		Indicate where in the draft DCO (APP-006] this power is included.
		Applicant's Response: Article 3 of the dDCO provides for the undertaker to be granted consent to construct the "authorised development". The authorised development is defined in article 2 of the dDCO as "the development and associated development described in Schedule 1 (authorised development) or any part of it, which is development within the meaning of section 32 (meaning of development of the 2008 Act". Schedule 1 describes the various elements of the authorised development (both NSIP and associated development. Item h) of the further development listed in the Schedule 1 authorises "…works associated with the provision of ecological mitigation and other works to mitigate any adverse effects of the construction, maintenance of operation of the authorised development" within the Order limits. The Applicant proposes to divert and replace one PRoW at its own expense as required in Article 13 and the responsibility for the maintenance of this will remain with the highway authority. Any mitigation outside of the Order limits is not authorised by the Order but, pursuant to Requirement 8(1) in Schedule 2 of the dDCO, no part of the scheme can commence until the details of both off-site and on-site mitigation, its monitoring and management have been submitted to and approved by the Secretary of State, in consultation with Natural England. Before giving this approval the Secretary of State must be content that the undertaker has the ability to implement both the off-site and on-site mitigation. Requirement 8(2) provides that the ecological mitigation must then be implemented, monitored and managed by the undertaker in accordance with the written details approved under Requirement 8(1).
Ec.1 Ecology and Biodiversity (including Habitats Regulations Assessment (HRA))		
Ec.1.1	The Applicant	**Kent Wildlife Trust (KWT) [RR- 0978]**

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	Natural England	KWT believe that the Noise Mitigation Plan [APP-009] does not consider in sufficient detail the impacts of specific flightpaths. KWT would hope to see a further examination on the predicted level of disturbance and pollution that will be caused by the airport proposal at sensitive nearby sites, such as Sandwich and Pegwell Bay. **What is the view of the Applicant and Natural England?**
		Applicant's Response: The Noise Mitigation Plan is not intended to assess the impacts of specific flightpaths. These are covered in detail in ES Chapter 12 [APP-034]. It should be noted however that the exact airspace options, operating principles and aircraft flight paths will be formalised through an Airspace Change Proposal (ACP), which is a separate consenting regime that would take place after the grant of the DCO. The predicted level of disturbance that will be caused by the Proposed Development at sensitive nearby sites, such as Sandwich and Pegwell Bay, was assessed within the Environmental Statement (ES) in Chapter 7 [APP-033] and Appendix 7.1 [APP-044]. It was concluded in the ES that there will not be significant effects on the qualifying bird species of the Sandwich Bay to Hacklinge Marshes SSSI or Thanet Coast and Sandwich Bay SPA/Ramsar as a result of visual and auditory disturbance from aircraft flights. The Applicant is discussing this issue with Natural England as part of producing a Statement of Common Ground which is being submitted for Deadline 3 (reference TR020002/D3/SOCG/NE). The ES presents assessments of the potential for the Proposed Development to adversely affect nearby sensitive sites through both aerial deposition (ES Chapter 6 and Chapter 7) and water discharge (ES Chapter 8 and Chapter 7) [APP-033]. It was concluded in both cases that there will not be significant effects on the qualifying habitats and bird species of the Sandwich Bay to Hacklinge Marshes SSSI, Sandwich Bay SAC or Thanet Coast and Sandwich Bay SPA/Ramsar. The Applicant does not consider that further examination of these effects is necessary.
Ec.1.2	The Applicant	**KWT [RR-0978]**

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	Natural England	KWT considers that the Environmental Statement [APP-033] needs to demonstrate that the measures to safely disperse birds and other wildlife from the runways without harm need to be further demonstrated, alongside a long-term conservation management plan that can demonstrate how consideration for wildlife can be accommodated alongside the specific requirements for commercial airport land use management. It is the view of KWT that these above matters have still not been adequately considered since the last iteration of statutory consultation, in particular with respect to Sandwich and Pegwell Bay. **What is the view of the Applicant and Natural England?**
		Applicant's Response: It is the Applicant's view that further consideration of the measures to safely disperse birds and other wildlife from the runways without harm is not warranted as the ES has already indicated how this will be achieved. Table 3.11 in Chapter 3 of the ES [APP-033] indicates that a Wildlife Hazard Management Plan (WHzMP) and a Habitat Management Plan (HMP) will be prepared post-DCO consent and that the management measures proposed (including bird scaring) would need to comply with guidelines provided in CAA CAP772 (Wildlife Hazard Management at Aerodromes). Additionally, a Mitigation and Habitat Creation Plan (MHCP) has been prepared and accompanied the ES as Appendix 7.13 [APP-046]. ES Chapter 7 assesses the potential effects of bird scaring activities on the interest features of Thanet Coast & Sandwich Bay SPA/Ramsar, Sandwich Bay to Hacklinge Marshes (SBHM) SSSI and Thanet Coast SSSI, concluding at paragraph 7.8.51 that there would be no significant effect on golden plovers (the key feature of interest) as a result of bird scaring activities.

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		It is intended that the HMP prepared post-DCO consent would be sufficiently flexible to allow for the adaptive management of habitats on site referenced in number of the assessments presented in ES Chapter 7 [APP-033]. The MHCP outlines the mitigation, habitat creation and monitoring requirements, indicating where information will be provided in the HMP.
Ec.1.3	The Applicant Natural England	**KWT [RR-0978]** Kent Wildlife Trust have concerns over the methodology and detail of some of the species surveys undertaken: **Section 41 species:** S41 species are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. KWT are concerned about the potential impact upon the Kent priority species brown hare. KWT would have expected to see further survey and detailed proposals to mitigate for this species. **What is the view of the Applicant and Natural England?** **Invertebrate Survey:** KWT believe the timing and survey effort for the invertebrate survey is suboptimal. Considering that the survey was made late in the season and under poor conditions for bees and wasps, and that few of the group, in terms of either species or individuals, were encountered, the number of scarce aculeates with restricted distribution is impressive and suggests that this group will prove of substantial interest.

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		What is the view of the Applicant and Natural England?
		Applicant's Response: i. Brown hare records were reviewed during the desk study, the result of which are reported in Appendix 7.2 of the ES [APP-044] and the potential for the species to be present on site was identified, despite the nearest record being located 1.85 km from the site. However, in Appendix 7.3 [APP-045], it is concluded in Table 7B.1 that brown hare will not be subject to significant effects due to environmental measures incorporated into or proposed to be implemented during construction and operation of the airport. Therefore, it was concluded that detailed surveys for brown hare were not required. ii. It is recognised by the Applicant that a single visit in August does not represent a detailed survey of invertebrates. As a result, additional terrestrial invertebrate surveys will be undertaken, as detailed in paragraph 7.3.12 of ES Chapter 7 [APP-033] and the programme of outstanding surveys submitted at Deadline 1 [TR020002/D1/Cover].
Ec.1.4	The Applicant	**KWT Biodiversity opportunity (RR-0978]** Kent Wildlife Trust would hope to see more detailed proposals that would demonstrate good quality enhancement opportunities for biodiversity. Although this site is just outside the Biodiversity Opportunity Area (BOA), any habitat creation should give consideration to its position on the chalk plateau and a locally-appropriate species planting list for any green spaces within the site itself. KWT are concerned that the mitigation and enhancement package does not reflect in both scale and detail what KWT would expect in order to mitigate for the impacts associated with this application and the level of survey effort thus far is not appropriate to inform such a plan. **What is the Applicant's view?**

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		Applicant's Response: The Biodiversity Area presented in the Mitigation and Habitat Creation Plan (MHCP) in Appendix 7.13 of the ES [APP-046] has been designed to provide compensatory habitat delivering a net gain. It is important to highlight that the habitats to be provided have been proposed to account for the species populations assumed during the assessment of the worst case scenario in the ES. The habitats and features proposed are therefore expected to deliver net gain and good quality enhancement opportunities for biodiversity. Additionally, Table 3.11 in Chapter 3 of the ES [APP-033] indicates that a Habitat Management Plan (HMP) will be prepared post-DCO consent. It is intended that the HMP would be sufficiently flexible to allow for the adaptive management of habitats on site referenced in number of the assessments presented in ES Chapter 7. The MHCP outlines the mitigation, habitat creation and monitoring requirements, indicating where information will be provided in the HMP. This would include locally-appropriate species planting lists. Therefore, the Applicant considers that sufficient mitigation and enhancement is proposed within the ES and secured through the dDCO. With respect to the level of surveys, it is recognised in paragraph 7.3.2 of the ES [APP-033] that additional survey work is required and a programme for that work has been submitted to the Examining Authority at Deadline 1 [TR020002/D1/Cover]. However, the assessment was undertaken using a worst case scenario and no significant negative effects were predicted when the proposed environmental measures are taken into account. Therefore, the objective of the planned survey work is to inform refinement of the mitigation proposals.
Ec.1.5	The Applicant	**Habitat Creation and Management Plan (APP-044 and 045]** **i. Confirm whether the proposed biodiversity area provides like-for-like compensatory habitat or is intended to deliver net gain, including evidence of any calculations undertaken.**

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		ii. Explain how the timing of implementation of habitat creation is secured through the dDCO (APP-006] or provide suitable wording of Requirement 8 to secure this. **iii. Section 5 of the Habitat Creation and Management Plan incorrectly states that the end date for woodland/hedgerow mitigation planting is 2010. Confirm the correct end date.** **iv. Section 2.6 of the Habitat Creation and Management Plan states that a Countryside Stewardship arrangement will be sought for the biodiversity area. What reliance can be placed on such an agreement and what measures would the Applicant take in the event that funding via Countryside Stewardship arrangements is not available?**
		Applicant's Response: i. The Biodiversity Area in the Habitat Creation and Management Plan (HCMP) [APP-044 and 045] has been designed to provide compensatory habitat delivering a net gain. It is important to highlight that the habitats to be provided have been proposed to account for the species populations assumed during the assessment of the worst case scenario in Chapter 7 of the ES [APP-033]. The habitats and features proposed in the HCMP are therefore expected to deliver net gain. ii. Under Requirement 8(1) in Schedule 2 of the dDCO, no part of the authorised development can commence until the details of both off-site and on-site mitigation, the timetable for its implementation, its monitoring and management have been submitted to and approved by the Secretary of State, in consultation with Highways England. Requirement 8(2) provides that the ecological mitigation must then be implemented, monitored and managed by the undertaker in accordance with the written details approved under Requirement 8(1). The timing of the implementation of habitat creation will be included in the details and an amendment has been made to Requirement 8 to clarify this commitment. iii. The correct end date for woodland/hedgerow mitigation planting is 2020.

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		iv. The Applicant is committed to implementing the Mitigation and Habitat Creation Plan [APP-044 and 045] regardless of whether it is possible to enter the Biodiversity Area into a Countryside Stewardship agreement, which would be a separate application and agreement between the landowner and Natural England.
Ec.1.6	The Applicant	**Natural England (NE) [RR-1408] Bird disturbance Golden plover (SPA feature):** NE's biggest concern is the potential for long term operational disturbance from aircraft flights. NE have confirmed previously with the Applicant that beyond distances of 500m in altitude and 1km ground-level lateral distance, golden plover are unlikely to be disturbed by the visual presence of flying aircraft. NE do not agree with the application of a noise threshold of 70dB LAmax, below which it can be assumed that no significant disturbance effects will occur. NE [RR-1408] cite Cutts et al. (2009)[1] who indicate that moderate to high disturbance (birds moving away) occurs above 70 dBA and it is therefore evident that birds are likely to begin reacting (heads-up, alarm calls etc.) to noise levels significantly below this. Even relatively low noise levels might still generate moderate behavioural responses in birds (e.g. increased vigilance) which can be significant under certain circumstances (e.g. freezing weather conditions when reduced foraging efficiency can reduce survival). NE advise that care should be taken when drawing conclusions based on other airports and other SPAs as NE's experience has been that impacts are likely to be site and population specific. NE do not agree with the Applicant's argument that golden plover in the vicinity of the Project Site are more likely to be habituated to sudden, high noise levels as a result of various agricultural activities (ES Paragraph 7.8.58 and 7.8.67 [APP-033]) as no evidence is provided as to how the local golden plover population reacts to these. Until this matter has been addressed to NE's satisfaction NE believe that a conclusion of no adverse effect on the integrity of the SPA for this species is premature. **Turnstone (SPA / Ramsar / SSSI feature):**

[1] Cutts, N., Phelps, A. & Burdon, D. 2009. Construction and Waterfowl: Defining sensitivity, response, impacts and guidance. Report to Humber INCA. Institute of Estuarine and Coastal Studies, University of Hull

Ref No.	Respondent	Question
		NE concerns with regards to the noise modelling to date are the same as for golden plover and until this matter has been addressed to NE's satisfaction NE believe that a conclusion of no adverse effect on the integrity of the SPA/ Ramsar for this species is premature. **Little tern (SPA / SSSI feature):** NE concerns with regards to the noise modelling to date are the same as for golden plover and until this matter has been addressed to NE's satisfaction NE believe that a conclusion of no adverse effect on the integrity of the SPA for this species is premature. **Other waders (SSSI features):** NE would expect to see the ES [APP-033] consider the potential for operational disturbance from aircraft flights as has been done for the SPA/ Ramsar species. **What is the view of the Applicant on these four items?** NE have requested the following additional information to be provided: • Noise contour maps: Noise contours (LAeq and LAmax) for the most important frequencies (2-8kHz in most situations) should be superimposed on the area of concern (e.g. designated site boundaries) using intervals of about 5dB. These should be mapped down to 55dB LAmax. Confirmation of the types of bird scaring methods to be used at Manston, and if they are similar and applicable to use in the Applicant's HRA, to those used at London Ashford Airport (Lydd) (As per Appendix 7.1, Appendix C, Table C.2 [APP-044]). • An assessment of operational noise, vibration and visual disturbance impacts on the following SSSI interest features: grey plover (plurialis squaterola), sanderling (Calidris alba) and ringed plover (Charadrius hiaticula).

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		Can the Applicant provide these three items?
		Applicant's Response: The Applicant's view on the first three items listed above is as follows. The Applicant is aware of Natural England's view on the use of 70dB LAmax as a threshold. This threshold was arrived at following a detailed desk study, as reported in Appendix 7.4 [APP-045], and its use justified in Chapter 7 of the ES [APP-033] and Appendix 7.1 [APP-044]. The Applicant is discussing this issue with Natural England as part of the production of a Statement of Common Ground, which is provided for Deadline 3 (reference TR020002/D3/SOCG/NE). The assessment in respect of fourth item, Other waders (SSSI features) is presented at iii below. The Applicant's response to Natural England's three requests is as follows. i. The Applicant will provide the requested noise contour maps at Deadline 4. ii. Table 3.11 in Chapter 3 of the ES [APP-033] indicates that a Wildlife Hazard Management Plan (WHMP) will be prepared post-DCO consent and that the management measures proposed (including bird scaring) would need to comply with guidelines provided in CAA CAP772. The measures would likely include: • Bird of prey distress calls; • Regular patrols; • Lures; and where necessary; • Pyrotechnic bird scaring cartridges (explosive shotgun shells). Given the restricted options available, the bird scaring methods to be used are unlikely to differ markedly from these. Additionally a number of engineering solutions will be implemented, as summarised in the response to OP.1.16. London Ashford Airport (Lydd) will also have to comply with CAP772 and so measures will be similar.

Ref No.	Respondent	Question
		iii. Grey plover (*Plurialis squaterola*), sanderling (*Calidris alba*) and ringed plover (*Charadrius hiaticula*) are found on intertidal habitats, foraging and resting on mudflats and resting on adjacent saltmarsh and sand banks, and very rarely occur inland (Balmer et al. 2013). Results from the Pegwell Bay Bird Distribution Survey undertaken in winter 2016/17 show that low numbers of grey plover and sanderling were recorded in Pegwell Bay (see ES Appendix 7.5, Figures 3.5 and 3.6 respectively) and no ringed plover were recorded during the surveys. The Waterbird Disturbance and Mitigation Toolkit (WDMT, Cutts et al. 2013) indicates that each of these three species is more tolerant of noise disturbance than golden plover, for which an assessment has been presented (ES Chapter 7.8, paras 7.8.52 to 7.8.67). It was concluded in ES Chapter 7.8, para 7.8.67, that the effects of disturbance and displacement of golden plover are predicted to be negligible and are considered not significant. Given the higher noise tolerance of these species, the same conclusion can be drawn.
Ec.1.7	The Applicant Environment Agency (EA)	**NE [RR-1408] Surface water discharge** The ES contains details of an outline drainage strategy (DS)[APP-033 and APP-045-048]. The intention at the operational stage is for all surface water to be treated on site and then discharged via an existing outfall into Pegwell Bay. Based on Figure 1.1 [APP-036] it is clear that the outfall lies within the boundary of a number of designated nature conservation sites. However, the Biodiversity chapter 7 [AP-033] is unclear exactly which designated sites and relevant interest features have the potential to be affected by the surface water outfall. References to 'the Pegwell Bay designated sites' are not sufficient. It is clear that the detailed design of the drainage strategy is not intended to come until after DCO consent at which point the Applicant 'may' need to apply for a new discharge permit from the Environment Agency (EA) (ES , Para 3.3.74 [APP-033]). However, Table 7.7 [APP-033] states on the same issue that 'Discharge from these ponds will be via a permitted discharge to Pegwell Bay.'

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		Table 8.6 [APP-033] summarises the Applicant's discussions to date with the EA. The most recent position appears to be that as the discharge to the Pegwell Bay outfall would be of surface water it would not normally require a permit. Given that the DS is an outline, that there is apparent ambiguity over whether the surface water discharge during operation will be controlled by a permit and the current lack of clarity over the designated site interest features which could potentially be affected, Natural England considers it premature at this stage for the Applicant to conclude that there will be no significant impacts on internationally or nationally designated sites as a result of the surface water discharge. **i. What is the view of the Applicant and the EA?** **ii. Provide the following:** • **A clear list of the designated sites and relevant interest features which have the potential to be affected by the surface water outfall; and** • **A description of the type of habitat that surrounds the outfall.** **iii. Confirm the likely nature, method and extent of works required to repair the damaged scour protection at the Pegwell Bay Outfall (ES Appendix 7.8 photographs in Appendix F)**
		Applicant's Response: i. The drainage strategy has been developed to address Environment Agency (EA) concerns regarding the potential for infiltrating drainage on the site to contaminate underlying groundwater. This requires that all surface water is collected, treated and then discharged to the coast at Pegwell Bay. The Applicant has consulted with the EA to develop a drainage strategy that meets their concerns about infiltration and is also effective in preventing flooding on the site or to neighbouring land. The Applicant, therefore, believes that reasonable steps have been taken to provide a drainage solution that addresses the EA concerns and that does not adversely impact Pegwell Bay. It is also understood that it is the EA's view that the drainage strategy, including the discharge is acceptable and this is addressed in the Statement of Common Ground being submitted for Deadline 3 [TR020002/D3/SOCG/EA].

<table>
<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
<tr><td></td><td></td><td>
The EA has stated that an Environmental Permit (EP) for the discharge is not required because the discharge will be of clean surface water.

ii. The assessment of the designated sites and relevant interest features which have the potential to be affected by the surface water outfall in section 7.9 of Chapter 7 [APP-033] concluded that there would be no significant effects arising from discharge from the outfall. However, a list of the designated sites and relevant interest features which have the potential to be affected by the surface water outfall, and which were included in the assessment, is provided below. The list has been drawn up based on a 100m zone of influence and is summarised for the European and Internationally designated sites from the Report to Inform the Appropriate Assessment (Table 3.1 and 3.2 in Appendix 7.3) [APP-045] and for the SSSI interest from the section 7.9 of the ES [APP-033] for ease of reference.
<table>
<tr><th>Designated Site</th><th>Interest features</th><th>Interest features with potential to be affected</th></tr>
<tr><td>Thanet Coast and Sandwich Bay Ramsar</td><td>Turnstone (non-breeding)
15 British Red Data Book invertebrate species</td><td>Turnstone (non-breeding)</td></tr>
<tr><td>Thanet Coast and Sandwich Bay SPA</td><td>A069 Turnstone (non-breeding)
A140 Golden plover (non-breeding)
A195 Little tern (breeding)</td><td>Turnstone (non-breeding)
Golden plover (non-breeding)</td></tr>
<tr><td>Sandwich Bay SAC</td><td>H2110 Embryonic shifting dunes
H2120 Shifting dunes along the shoreline
H2130 Fixed coastal dunes with herbaceous vegetation
H2170 Dunes with Salix repens ssp. argentea
H2190 Humid dune slacks</td><td>None</td></tr>
<tr><td>Sandwich Bay to Hacklinge Marshes SSSI</td><td>Aggregations of non-breeding birds - Golden Plover, Pluvialis apricaria
Aggregations of non-breeding birds - Grey Plover, Pluvialis squatarola</td><td>Golden plover (non-breeding)
Grey plover (non-breeding)
Sanderling (non-breeding)
Ringed plover (non-breeding)</td></tr>
</table>
</td></tr>
</table>

Ref No.	Respondent	Question		
			Aggregations of non-breeding birds - Ringed Plover, Charadrius hiaticula Aggregations of non-breeding birds - Sanderling, Calidris alba Assemblages of breeding birds - Lowland open waters and their margins EC - Cenomanian-Maastrichtian EC - Mesozoic - Tertiary Fish/Amphibia EC - Palaeogene EC - Quaternary of South-East England Invertebrate assemblage Lowland ditch systems Population of RDB moth - Idaea ochrata cantiata, Bright Wave Population of Schedule 8 plant - Himantoglossum hircinum, Lizard Orchid Population of Schedule 8 plant - Orobanche caryophyllacea, Bedstraw Broomrape S4 - Phragmites australis swamp and reed-beds SD11 - Carex arenaria - Cornicularia aculeata dune community SD12 - Carex arenaria - Festuca ovina - Agrostis capillaris dune grassland SD14 - Salix repens - Campylium stellatum dune-slack community SD2 - Honkenya peploides - Cakile maritima strandline community	

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	SD4 - Elymus farctus ssp. Boreali-atlanticus foredune community SD6 - Ammophila arenaria mobile dune community SD7 - Ammophila arenaria - Festuca rubra semi-fixed dune community SD8 - Festuca rubra - Galium verum fixed dune grassland SD9 - Ammophila arenaria - arrhenatherum elatius dune grassland SM14 - Atriplex portulacoides saltmarsh SM16a - Festuca rubra saltmarsh Puccinellia maritima sub-community SM18 - Juncus maritimus saltmarsh SM21 - Suaeda vera - Limonium binervosum saltmarsh SM24 - Elytrigia atherica saltmarsh SM9 - Suaeda maritima saltmarsh Vascular plant assemblage	

The outfall is located on the boundary of the European and international designated sites, and just outside the boundary of the SSSI. Photographs presented in Appendix 7.8 of the ES [APP-046] illustrate that the outfall discharges directly onto cobbles and then mudflat. There is no visible evidence of any scour from in the immediate vicinity or further afield from this existing discharge point.

iii. Works to the outfall will be limited to repairs and maintenance tasks to rectify any dilapidation of the asset. No works are planned to change the overall width, length or depth of the asset or change the nature of its intended operation.

Planned tasks include:

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		- Cleaning / replacement of the metal baffle boards which seen in the Appendix 7.8 photographs for example at least one baffle board is visibly detached from the outfall. These are required to add turbidity to the outfall flow and prevent scour. - Stones / debris will be removed from the concrete channel. - The outfall pipe includes a non-return or 'flap' valve, this is heavily rusted and partially open. This will be repaired or replaced with a similar cover. - In part due to the above cover being partially open, the outfall pipeline will have deposits of sand / silt along it's lower length, this will be removed through water 'jetting' from the upstream manhole. This process involves the pumping of water through the pipeline which will flush sediments out of the system. - The pedestrian railing at the outfall is rusted in places, the integrity of this would be checked and maintained / replaced as necessary. If necessary this may be extended to suit latest safety guidance and best practice. - The concrete channel, headwall and gratings will be cleaned / repaired. Cleaning would be through a jet wash and concrete repairs would be through a cement compound or off the shelf product. It's expected all of the above activities could be achieved through 2-3 man teams with maintenance vehicles.
Ec.1.8	Natural England	**ECJ Rulings on Mitigation in HRA Screening** In April 2018, the European Court of Justice (ECJ) issued a decision in the case of *People Over Wind, Peter Sweetman v Coillte Teoranta (C-323/17).* The ruling confirmed that proposed mitigation measures cannot be taken into account for the purposes of screening under the UK Habitats Regulations, which give effect to the EU Habitats Directive (92/43/EEC) [APP-044]. **Does Natural England (NE) have a view on the significance of these rulings for the Applicant's *Report to Inform the Appropriate Assessment* [APP-044]?**
		Applicant's Response:

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		N/A
Ec.1.9	Natural England	**Designated sites** The Planning Statement [APP-080] states at paragraph 2.18: *"There are no statutory environmental designations that apply within the DCO application site. However, the outfall corridor goes through/under the Sandwich Bay Special Area of Conservation (SAC) and its constituent Site of Special Scientific Interest (SSSI) (Sandwich Bay to Hacklinge* *Marshes). The outfall discharges into the Thanet Coast and Sandwich Bay Special Protection Area (SPA) and Ramsar site."* **Does Natural England concur with the above statement?**
		Applicant's Response: N/A
Ec.1.10	The Applicant	**Scoping Opinion Appendix 1.2 of ES [APP-043]** Paragraph 7.3.13 of the ES [APP-033] states: *"...Inspectorate (PINS) who provided a Scoping Opinion (Appendix 1.2) which although no longer formally associated with this application is still relevant."* The ExA notes the contents of paragraphs 1.5.6-1.5.8 of the ES [APP-033].

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		i. Explain the above statement in paragraph 7.3.13. **ii. Confirm what you regard as the "*adopted*" Scoping Opinion for the EIA supporting this Application.**
		Applicant's Response: i. The wording in Paragraph 7.3.13 of the Environmental Statement (ES) (**APP-033**) reflects the Applicant's statements in paragraphs 1.5.6 – 1.5.8 of the ES (**APP-033**). Between the Planning Inspectorate providing a Scoping Opinion in August 2016 and the application being submitted in July 2018, new EIA Regulations came into force in May 2017 and it is not clear from the wording of the transitional provisions whether the 2016 scoping opinion continues to apply to the Proposed Development given that it was applied for by a different company albeit for the same project. The Applicant decided, therefore, to conform to the 2017 EIA Regulations and conducted a further consultation on that basis to include the new areas the 2017 Regulations cover. On the basis that the underlying project had not changed, a revised scoping opinion was not sought following the decision to conform with the 2017 EIA Regulations and as such the Applicant voluntarily complied with the relevant requests contained within the 2016 Scoping Opinion. ii. The only Scoping Opinion is that received in August 2016; there is no "adopted" Scoping Opinion for this project for the reasons given above; obtaining a Scoping Opinion is not compulsory. This document is provided in Appendix 1.2 of the ES (**APP-043**).
Ec.1.11	The Applicant	**Significance levels** **Point to where significance criteria are defined in Chapter 7 of the ES (APP-033]?**
		Applicant's Response: Significance criteria are defined in paragraphs 7.7.1 – 7.7.11 of Chapter 7 of the ES [APP-033].

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Ec.1.12	The Applicant	**Golden Plover** Figure 4.4 of the Ecological desk study [APP-045] appears to show 402 Golden Plover roosting within the order limits whereas paragraph 4.2.2.11 of the Report to Inform the Appropriate Assessment states that they are in a field adjacent to the south east. **Provide clarification regarding the location of the Golden Plover, and a revised Figure 4.4, with the peak counts clearly shown.**
		Applicant's Response: The location of the 402 golden plover was not within the Order Limits (as depicted in Figure 4.4) [APP-045] but in the field adjacent to the south-east, as stated in Table 4.2 of Appendix 7.2 and in paragraph 4.2.2.11 of Appendix 7.1 [APP-044]. A revised Figure 4.4 has not been provided. Due to the extensive area of land covered by the golden plover surveys presented in Henderson & Sutherland (2017), it was necessary to place the circles denoting the location of the golden plover flocks over the centre point of the 1km National Grid Square concerned. For this 1km square, the location happens to fall within the Order Limits but this does not necessarily indicate any presence within the Proposed Development site. Presence or otherwise will be confirmed in the surveys to be carried out during the current season.
Ec.1.13	The Applicant	**Report to Inform the Appropriate Assessment (APP-044]** The Report to Inform the Appropriate Assessment (RIAA) section 4.5.3 discusses the potential impacts of mean annual NOx levels on Sandwich Bay SAC focussing on receptors E21-E24. In year 2 the assessment states that only E22 requires further assessment. This is inconsistent with the data presented in Appendix 6.5 for receptors E21-E24. The text also does not explain

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		that receptor E24 exceeds the critical level for NOx and the 1% Environment Agency screening threshold for further assessment in all years. **Provide further clarification regarding the conclusions of no adverse effects on integrity of Sandwich Bay SAC arising from mean annual NOx emissions for all relevant receptors as set out in section 4.5.3 of the RIAA.**
		Applicant's Response: Receptor E24 was omitted from the assessment in the Report to Inform the Appropriate Assessment (RIAA) [APP-044] in error. However, an error in the NOx assessment has subsequently been identified and the critical level for NOx is not exceeded at receptor E24. The data presented in Appendix 6.5 [APP-044] for receptors E21-E24 was calculated using a screening criterion for major receptors of a Process Contribution greater than exactly 1.0% of the assessment level. However, as stated in paragraph 6.2.40 in the ES [APP-033] guidance from the Institute of Air Quality Management recommends that a criterion of 1.5% is more appropriate (i.e. the percentage should be rounded before applying the 1% test), and this was used to screen out receptors E21, E23 and E24 in Year 2. The data presented for receptor E24 in Appendix 6.5 [APP-044] is incorrect. The annual mean NOx at this receptor in Year 2 should be a process contribution of 0.25 µg m^{-3} and a predicted environmental concentration of 26.15 µg m^{-3}, similar to receptors E21–E23. Receptor E24 remains below the critical level for annual mean NOx in all assessment years. In Years 6 and 20, it does not meet the Environment Agency criteria for screening out, and the assessment given in paragraphs 4.5.3.22 and 5.4.3.27 of the RIAA [APP-044] still applies.
Ec.1.14	The Applicant	**Thanet Parkway Station**

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		Thanet Parkway Station is excluded from the in-combination assessment presented in the Report to Inform the Appropriate Assessment [APP-044] and from discussion regarding the effectiveness of mitigation in the proposed area for habitat creation to the south of the airport. **Provide commentary regarding the implications of this project for the conclusions in the RIAA and the biodiversity chapter should the parkway station be consented?**
		Applicant's Response: The in-combination assessment in the RIAA (Appendix 7.1) [APP-044] refers to ES Chapter 18 [APP-035] at paras 2.1.2.5; 3.2.4.1; 4.2.5.1 and 4.4.4.1. The Cumulative Effects assessment in ES Chapter 18 [APP-035] includes Thanet Parkway Station (Table 18.4) i.e. it is scoped in to the assessment. An assessment of cumulative effects on biodiversity is presented in paragraphs 18.5.9 to 18.5.32 of Chapter 18.5 [APP-035] for both on and off-site receptors. Thanet Parkway Station has therefore not been excluded from the in-combination assessment. The conclusion of the assessment was that no significant cumulative effects on biodiversity are predicted.
E.1 Other environmental		
E.1.1	The Applicant	**Public Health England (PHE) Health Impact Assessment (HIA) [RR-1608]** The HIA (Chapter 15 of ES [APP-034] has undertaken a community engagement and consultation with the local public health and health care system. It identifies a series of recommendations that should be agreed with the local Director of Public Health (DPH) and incorporated into the development plans.

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		Explain what effort has been made to address the concerns of consultation bodies including Public Health England regarding the necessary engagement required to establish the baseline for assessment of effects to public health (including related systems) and how this might affect the findings of this assessment? **Does the Applicant propose to have an ongoing assessment in conjunction with input from the local DPH / Care Commissioning Group (CCG) and through local community consultation?**
		Applicant's Response: i. RR-1608 from PHE does not make any statement regarding the baseline for the assessment or identify any specific concerns about the engagement undertaken. Section 15.3 of Chapter 15 in ES Volume 2 [APP-034] and Section 4 of the HIA in Appendix 15.1 of ES Volume 13 [APP-058] set out the engagement undertaken. This includes HIA scoping with the Kent Director of Public Health (DPH), in which the approach and scope of the assessment were agreed. The Clinical Chair of Thanet CCG was also consulted and both the DPH and Clinical Chair provided commentary about baseline public health (life expectancy and mortality), underlying factors (employment and lifestyle), and local challenges and priorities (health care capacity) that have been taken into account in the assessment. Such input reinforced the scope and focus of the assessment, and complemented the development of an appropriate population and health baseline, tailored to the project and associated health pathways. Further commentary concerning baseline public health was made through statutory (s42) engagement and is referenced in Table 4.1 of the HIA, for example concerning the high levels of socio-economic deprivation in Thanet. Statutory consultees included PHE. The Applicant has undertaken extensive public engagement and the health points raised are documented in Table 4.2 of the HIA in Appendix 15.1.

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		Baseline data sources used in the HIA are summarised in paragraph 15.3.2 of Chapter 15 and the information is detailed in Appendix 15.2 (Community Profile) [App-058]. The data sources include PHE's local health profile and NHS statistics supplemented by sources such as British Heart Foundation publications. Community health needs and objectives have been identified from the Kent Joint Strategic Needs Assessment and feedback from the DPH (see Table 15.2 in Chapter 15). The specific health needs or objectives have been referenced in the assessment of effect significance (see for example paragraph 15.8.15 or 15.8.39). Overall, a range of information sources from a variety of organisations including PHE were used to establish the baseline for the assessment. This included engagement with PHE, the Kent DPH and Thanet CCG Clinical Chair as well as the wider public. Feedback from the Kent DPH and Thanet CCG Clinical Chair concerning the public health baseline was specifically referenced in the assessment. It is not considered that further engagement to revisit the baseline is required, nor that this would affect the conclusions of the assessment in terms of the prediction of significant effects. ii. Yes. The Applicant proposes ongoing engagement with health stakeholders including the DPH, CCG and local community through a Community Consultative Committee which will be secured through a requirement in the DCO. This is confirmed as an embedded mitigation measure in Table 15.3 of Chapter 15 in ES Volume 2 [APP-034]. The Committee would provide a formal mechanism through which information concerning public health and any concerns can be communicated to the Applicant and any actions taken in response can be agreed, which could include ongoing assessment if and as required.
E.1.2	The Applicant	**The "*worst case*"** At paragraph 1.57 of the Planning Statement [APP-080] it states: *"Where details will not be known until the detailed design stages of the development process, for example the exact location of buildings that will be demand-led, the ES sets out the relevant design parameters used for the assessment and explains, with reference to the parameters, what the maximum extent of the proposed development may be (the 'worst case'), and assesses the potential adverse effects which the project could have, to ensure that the impacts of the project as it may be*

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		constructed have been properly assessed. Other details such as the length and width of the runway and taxiways are 'fixed' for the purposes of the DCO." **Tables 3.7 (freight) and 3.8 (passenger) of the ES [APP-033] describe ATMs up to year 20. Is this the "*worst case*" in terms of ATMs/Year, that has been assessed in the EIA?**
		Applicant's Response: Yes. Table 3.7 (freight) and Table 3.8 (passenger) of the ES (**APP-033**) describe the worst case scenario of ATMs for freight and passengers per year, up to Year 20. This is the worst case as assessed in the EIA.
E.1.3	The Applicant	**Passenger Air Traffic Movements** The Planning Statement [APP-080] states at paragraph 3.31: *"The initial terminal will provide airside/landside access and will be served by three refurbished Code C aircraft stands. A later expansion of the building and addition of a fourth passenger stand will accommodate the demands of the passenger forecast."* The dDCO [APP-006] states in Schedule 1: *"**Work No.10** — The construction and rehabilitation of pavements for the creation of 3 Code C aircraft parking stands and associated pavement and infrastructure.* ***Work No.11** — The construction and rehabilitation of pavements for the creation of 4 Code C aircraft parking stands and associated pavement and infrastructure."* The Planning Statement refers to four Code C aircraft stands.

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		Schedule 1 of the DCO in Works 10 and 11 refers to seven[2] Code C aircraft stands. **i. How many Code C aircraft stands has the EIA assessed?** **ii. Did the Code C aircraft stands form part of the "*worst case*" scenario assessed in the EIA?**
		Applicant's Response: i. The Environmental Impact Assessment (EIA) assessed the impact of seven Code C stands in total. Four Code C passenger aircraft stands (including three refurbished stands and one new stand) and three Code C tear-down stands associated with the recycling facility. Paragraph 3.3.3 of the Environmental Statement (ES) [APP-033] summarises the works to be undertaken and includes; "*Construction of new aircraft maintenance/recycling hangars, including three tear-down stands" and "extension of passenger service facilities including an apron extension to accommodate an additional aircraft stand (total of four passenger stands) and increasing the current terminal size.*" ii. The seven Code C aircraft stands formed part of the worst-case scenario assessed in the ES. Paragraph 3.1.7 of the ES [APP-033] states *"The assessments contained in the technical chapters (Chapters 6-17) of this ES have, in all cases, adopted a realistic worst case based on the parameters outlined below and shown on the illustrative masterplan at Figure 3.1."* The description of the Proposed Development and the illustrative masterplan (APP-079) include the four new Code C stands and three refurbished Code C stands.
E.1.4	The Applicant	**Waste** **Can the Applicant provide an estimate of operational waste generated by the proposed airport and provide commentary on the impact of such waste on local landfill capacity?**

[2] It is assumed that three of these are "*recycling hangars*" as per Table 3.3 of [APP-080]

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		Applicant's Response: At this stage an estimate of operational waste has not been produced. It is expected that detailed quantities and provision relating to waste generation and management would form part of the operational environmental management plan.
E.1.5	The Applicant	**Assessment of Strategic Site Alternatives NTS (APP-032]:** Paragraph 2.1.13 of the NTS [APP-032] states: *"A range of alternative strategic sites were considered, these being airfields in the south-east and London's six main airports: Stansted; Heathrow; Gatwick; Luton; London City; and Southend. However, each of the above has major shortfalls in terms of successfully supporting an increased freight and passenger capacity (Table 2.1)."* **Can the Applicant provide the detailed assessment of strategic sites that supports Table 2.1(APP-032] and Table 2.1 of the ES (APP-033] over and above that provided in paragraphs 2.3.5 to 2.3.27 of the ES (APP-033]?**
		Applicant's Response: The detailed assessment of strategic alternative sites is presented in the Azimuth Report [APP-085], specifically Volume 1, Section 5 which considers airport capacity for freighter operations in the South East.
E.1.6	The Applicant	**PHE** In its RR [RR-1608] PHE point to the omission of a Decommissioning Environmental Management Plan (DEMP) from the application. PHE believe that a DEMP can also feed into the planning and design process, ensuring that a site is constructed and managed in such a way as to simplify or expedite decommissioning when the time comes. PHE would recommend that decommissioning, demolition and contamination issues are fully considered in the design and construction stages of the project

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		to minimise future risks to the environment and public health at such time as the site ceases to operate or faces further major development. **What is the Applicant's view?**
		Applicant's Response: The Applicant's view on the Decommissioning Environmental Management Plan (DEMP) is outlined in paragraphs 3.3.294 - 3.3.296 of the ES [APP-033]. Paragraph 3.3.294 of the ES states *"it is considered that the airport will be operational long into the future and consequently there will not be any requirement for decommissioning of the airport.*" As it is assumed that the airport will be operating in the long term, it is not considered that a DEMP is required at this stage. In the event that the site is decommissioned at some stage in the future, a DEMP would be prepared taking into account circumstances and best practice at that time. The Proposed Development will be designed and constructed in accordance with contemporaneous design standards all of which ensure that potential risks to public health during decommissioning are considered and minimised.
E.1.7	The Applicant	**Planning Statement (APP-080] and dDCO (APP-006]** The Planning Statement at paragraphs 1.35-1.36 states: *"The Proposed Development is to reconstruct the airport with 19 cargo stands (and some passenger stands, which will not handle cargo aircraft), the construction of which will involve development in planning terms. Using the figure of six arriving and departing aircraft per stand per day (i.e. between 0700 and 2300 – as only limited night flights are contemplated), one arrives at a theoretical maximum capability figure of (19x12x365=) 83,220 movements per year, and therefore the capability of the airport will be at that level, noting that this is theoretical capability rather than predicted operation.*

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		The increase in capability is therefore 83,220 movements per year of cargo aircraft, more than eight times the required threshold, assuming the existing capability is zero, as demonstrated above." Schedule 1 of the DCO states: *"**Work No.9** — The construction and rehabilitation of pavements for the creation of 19 Code E aircraft parking stands and associated pavement and infrastructure."* **Has what is being applied for in the DCO ie 83,220 movements, been assessed in the EIA (APP-033-036]?**
		Applicant's Response: No, the figure of 83,220 is the 'physical capability' of the number of cargo movements the airport could accommodate, and is far beyond the realistic worst-case that has been assessed in the ES [APP-033]. Given the concern expressed about this issue in relevant representations and by the Examining Authority through its questions, and since the Applicant does not expect the number of ATMs assessed in the ES to be exceeded, it is now adding an annual limit of ATMs equivalent to the number assessed in the ES, namely 17,170 cargo plus 9,298 passenger movements, i.e. 26,468 movements in total. This cap has been included in the revised Noise Mitigation Plan [TR020002/D3/2.4] being submitted at Deadline 3. This total includes the movements generated by the 3 recycling stands but does not include general aviation movements. To put this into context, in 2017 Heathrow had 476,186 ATMs, 18 times as many, and the figure above would make Manston the 18th busiest airport in the UK, just above Jersey. It is 73 ATMs a day on average.
E.1.8	Natural England (NE)	**Incomplete surveys** Paragraph 5.4.17 of the ES [APP-033] states:

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	KCC Environment Agency (EA) Heritage England (HE)	*"Although complete surveys have presently not been possible, sufficient information exists whereby the following has been applied. Where survey information is absent, a realistic worst-case approach has been adopted to what might be found had all the surveys been carried out, based on desktop surveys, analysis and site surveys undertaken. This is coupled with a commitment to carry out further surveys once access to land has been obtained, whether through voluntary agreement or compulsory access following the making of the application, or should the DCO be granted, access once ownership of the land has been obtained."* **What limitations and uncertainty do NE, EA, KCC and HE believe these incomplete surveys introduce into the EIA?**
		Applicant's Response: N/A
E.1.9	The Applicant	**Chapter 15 Health and Wellbeing (APP-034]** **i. With reference to relevant definitions can the Applicant explain how sensitivity and magnitude of impacts are defined in the context of this Chapter and confirm the extent to which they have been used to inform the assessment of significance and the need for further mitigation?** **ii. Point to where the significance criteria:** • **Negligible;** • **Minor;** • **Moderate; and** • **Major** **are defined.**

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		Applicant's Response: i. There are no generally-agreed definitions of significance for the assessment of health and wellbeing in EIA, and so the terms listed above have not been given explicit definitions in Chapter 15. The magnitude of impact can vary over orders of magnitude for different health or wellbeing outcomes or in some cases can only be predicted qualitatively, meaning that fixed numerical thresholds relating impact magnitude to significance cannot be set. ii. At the spatial scale of both environmental impacts (health pathways) of major development projects and of public health statistics, it would also frequently be difficult to fully differentiate higher and lower-sensitivity receptors without moving to the level of personally-identifying information on individuals, making a matrix of significance based on levels of receptor sensitivity problematic to apply. The approach adopted for assessment of significance is therefore one of professional judgement supported by a clear explanation of the factors used in that judgement, as explained in paragraphs 15.7.8–15.7.11. This approach is consistent with the guidance in the IEMA Primer on Health in EIA (reference 15 in Chapter 15 of the ES [APP-034]), which states on page 13 that: *"Defining significance for population and human health can be challenging and there is currently no guidance for considering population and health in UK EIA practice… Population and human health significance in EIA should include a professional judgement supported by evidence, for example on an issue's 'importance' and 'acceptability'. Available evidence to cite in the EIA may include: scientific literature; consultation responses; baseline conditions; local health priorities; and regulatory standards."*
E.1.10	The Applicant	**Chapter 15 Health and Wellbeing (APP-034]** Paragraph 15.8.5 states:

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		"The evidence suggests that the relative change in noise also has the potential to contribute towards approximately one annual incident case of disease or mortality from ischaemic heart disease or stroke at Year 2 levels, rising to around two to four cases at Year 20 levels. This corresponds to a 2.8% to 4.3% change in background incidence." The ExA appreciates that this does not imply that all cases would be mortality. **In the Applicant's professional opinion how many cases will end in mortality in Year 20?**
		Applicant's Response: In the Applicant's view the available evidence does not allow such an estimate to be made with any confidence. The stroke and ischaemic heart disease (IHD) exposure-response factors used in the assessment were drawn from pooled analyses that incorporated studies of case incidence, prevalence, mortality or a combination of these, due to the limited number of studies available (see discussion in Appendices 15.1 and 15.3) [APP-058]. The IHD pooled analysis of Vienneau *et al*, 2015 (reference 76 in Appendix 15.3) for example noted no statistically significant difference in the pooled risk estimates for fatal and non-fatal IHD cases, making the sub-division of outcomes difficult to draw from the evidence available. Some general guidance to the commonness of fatal compared to non-fatal outcomes of these diseases can be gained from examining the baseline rates reported in Table 6.2 of Appendix 15.1, which suggest very broadly that stroke and IHD mortality rates occur at around one-third to one-half of the rate of incident cases (emergency hospital admissions), though noting the possibility of partial double-counting.
E.1.11	The Applicant	**Chapter 15 Health and Wellbeing (APP-034] and Cumulative Effects (APP-058]** **i. Point to where in the EIA, cumulative health effects are explicitly assessed?**

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		ii. Confirm whether an assessment of the cumulative impacts from noise on proposed and future receptors has been undertaken, and point the ExA to where this is located within the application documents?
		Applicant's Response: i. Health effects due to cumulative developments have not been reported explicitly at one single location in the ES due to the range of health pathways involved (which are shown in Table 15.4 of Chapter 15 [APP-034]). Cumulative development effects through the relevant health pathways have been assessed and are reported in Chapter 18 of the ES [APP-035], as noted in paragraph 15.6.11 of Chapter 15. For air quality, transport and socio-economic pathways, no additional effects of other developments are identified in Chapter 18 that would combine to give a significant cumulative effect. As such, cumulative impacts do not change the significance of health effects reported in Chapter 15. The remaining health pathway specified in Chapter 15 is noise exposure, which is assessed as having a significant, 'moderate adverse' impact on health (paragraph 15.8.18). Further significant adverse noise effects are identified in Chapter 18 due to cumulative residential development projects that introduce new receptors (paragraphs 18.5.111 and 18.5.112). ii. The Applicant can confirm that an assessment of the cumulative impacts from noise on proposed and future receptors has been undertaken. The assessment is presented in Chapter 18 Cumulative effects [APP-058] Section "*Assessment of Cumulative Effects: Noise*" in paragraphs 18.5.106 to 18.5.114.
E.1.12	The Applicant	**Chapter 15 Health and Wellbeing [APP-034]** **Point to proposed health mitigation in the EIA, which seeks to maximise the health benefits of the Proposed Development and mitigate any negative health impacts.**

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		Applicant's Response: Mitigation and enhancement measures for adverse and beneficial health impacts, respectively, are listed in Table 15.3 'Embedded Mitigation' of Chapter 15 in ES Volume 2 [APP-034]. The third column of the table briefly explains how each measure would influence health and the local health needs/objectives supported, where relevant. Further detail about each of the measures in Table 15.3 is provided in Section 7, 'Health Action Plan' of the HIA in Appendix 15.1 of ES Volume 13 [APP-058]. These commitments will be included in the updated register of environmental actions and commitments (**APP-010**) to be submitted for Deadline 4. The dDCO (**APP-006**) secures these commitments through Requirement 7 which requires the Applicant to operate the authorised development in accordance with an operation environmental management plan (**OEMP**). The OEMP must include the mitigation measures specified in the register of environmental actions and commitments which are relevant to the operation and maintenance of the authorised development.
E.1.13	The Applicant	**Chapter 15 Health and Wellbeing [APP-034]** **Explain what effort has been made to address the concerns of consultation bodies including PHE regarding the necessary engagement required to establish the baseline for assessment of effects to public health (including related systems) and how this might affect the findings of this assessment.**
		Applicant's Response: This question is a duplicate of question E.1.1 – please see the response to E.1.1, above.
E.1.14	The Applicant	**Chapter 15 Health and Wellbeing [APP-034]**

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		Confirm that those actions noted at "*further recommended actions*" in section 7 of Appendix 15.1, represent mitigation measures that will be brought forward as part of the Proposed Development, and whether they have been relied upon as part of the health and wellbeing assessment.
		Applicant's Response: The Applicant confirms that the recommended actions in section 7 of Appendix 15.1 [APP-058] are adopted as committed mitigation measures, as shown by their inclusion in the embedded mitigation table 15.3 in Chapter 15 [APP-034]. As embedded mitigation, they have been relied on in the health and wellbeing assessment in Chapter 15, Section 15.8. See, for example, paragraph 15.8.48 where this is illustrated. These commitments will be included in the updated register of environmental actions and commitments (**APP-010**) which will be submitted for Deadline 4. The dDCO (**APP-006**) secures these commitments through Requirement 7 which requires the Applicant to operate the authorised development in accordance with an operation environmental management plan (**OEMP**). The OEMP must include the mitigation measures specified in the register of environmental actions and commitments which are relevant to the operation and maintenance of the authorised development.
E.1.15	The Applicant	**Chapter 15 Health and Wellbeing (APP-034]** **Explain the extent to which mitigation measures relied upon within the ES are secured in the DCO.**
		Applicant's Response: The commitments listed in Chapter 15 in respect of health and wellbeing are contained within the Register of Environmental Actions and Commitments [APP-010] and through Requirement 6 (construction and environmental management plan) and Requirement 7 (operation environmental management plan) of the dDCO the authorised development must be constructed,

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		operated and maintained in accordance with the REAC ensuring that those mitigation measures that are relevant are in place throughout the life of the authorised development.
E.1.16	The Applicant	**Chapter 15 Health and Wellbeing (APP-034]** The ES presents a moderate adverse effect to human health associated with exposure to operational noise. The ES does not explain the extent to which options available to mitigate such effects have been explored. **Explain the extent to which additional options to minimise such effects have been considered and the reasons why any such option has not been taken forward.**
		Applicant's Response: The Health Assessment at Chapter 15 of the ES [APP-034] adopts a worst-case scenario when considering the effectiveness of noise mitigation which can be summarised as assuming that it will either have no effect at all or will not be taken up at potential noise receptors. As such the effects of noise on human health have been assessed on the basis that they are not mitigated at all. In accordance with government policy, the Noise Mitigation Plan [APP-009[proposes a number of measures such as offering noise insulation or relocation to residents if they fall within the SOAEL or UOAEL levels predicted in the noise assessment, and to schools and other public buildings if the 60dB threshold is predicted to be exceeded. Nonetheless, although such measures are now secured within the DCO, whether or not they are taken up, it remains right to assume the worst case assessed in the ES.
E.1.17	The Applicant	**Cumulative effects**

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		In Chapter 18 of the ES [APP-035] eight different types of effect are mentioned but not all are defined: 1. Cumulative effect 2. In–combination effect 3. Inter project effect 4. Inter related effect 5. Interactive effect 6. Combined effect 7. Inter relationship effect and 8. Individual effect **Define what they mean by these eight different effects.**
		Applicant's Response: As noted by the ExA, Chapter 18 of the Environmental Statement (**APP-035**) uses a number of terms in describing the environmental effects associated with the Proposed Development. These are captured in two overarching types of cumulative effect (all of which are therefore captured in item 1) as defined below: • **Inter-related effects**: These relate to the effects reported in two or more ES topic chapters that could both effect a single receptor. Inter-related effects are described in paragraph 18.1.4 of the ES as: *"consideration as to whether any of the individual effects of the Proposed Development would combine to create a cumulative effect;* and

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		consideration of interactive effects in relation to a specific receptor.". In the context of the above definition inter-related effects therefore include those described as: ○ (item 2 above) In combination effects – generally used in the context of climate change and refers to the exacerbating effect of climate change in combination with the development. ○ (4) Inter-related effects- overarching definition relating to the additive effect of two topic impacts. ○ (7) Inter-relationship effects- a descriptive or narrative term referring to how different topic impacts combine to effect a single receptor. ○ (6) Combined effects - used here in the context of two effects combining to create a cumulative effect of a greater magnitude than the individual effects. The definition of these effects does not differ although they are used interchangeably depending on the context of the assessment itself. • **Cumulative effects with other developments**: These are defined in paragraph 18.1.10 of the ES as *'the interaction of the Proposed Development and other 'major' developments (as defined by PINS Advice Note 9: Rochdale Envelope) within the context of the site and any other reasonably foreseeable proposals in the vicinity, where there is the potential for combined environmental effects."* These include: ○ (3) Inter-project effects- the effects that different projects may have on each other ○ (5) Inter-active effects- the interaction between projects ○ (6) Combined effects (in the context of the effects of two or more developments combining to create a greater effect than those predicted for the Proposed Development alone) As with inter-related effects these terms are used interchangeably depending on the context of the assessment itself. The term (8) 'individual effect' refers to the effects of the Proposed Development that have been reported in Chapters 6 – 17 of the Environmental Statement (**APP-033** – **APP-035**). These are not 'cumulative effects' but the specific effects reported by each ES topic.

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E.1.18	TDC	**Shortlist of projects for cumulative assessment** **Does TDC agree with the shortlist of projects considered in the cumulative effects assessment (APP-035]?** If not please specify which other development TDC considers has the potential to give rise to significant cumulative effects that should be considered.
		Applicant's Response: N/A
E.1.19	The Applicant	**Table 18.7 2nd row (APP-035]** Significant daytime inter-related noise and visual effects are anticipated in relation to visitor arrival and departure at the museums on site and any outdoor exhibits during the operational phase of the Proposed Development. **What mitigation is proposed for visitors to the museums?**
		Applicant's Response: No additional noise mitigation is proposed to reduce noise impacts on visitors arriving or departing at the museums because noise on its own would not result in a significant effect that needs to be avoided. Arrival and departure at the museums and the viewing of outdoor exhibits are a transitory activity. A visitor arriving or departing will not be present at any one location for a length of time that a significant noise effect could occur. Furthermore a visitor at an aviation museum located at an airport would expect to hear aviation noise.

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		In terms of the visual impact element of the reported inter-related effect, no mitigation is proposed as the museums have indicated to the Applicant that the viewing of aircraft taking off and landing is something that adds value to rather than detracts from the visitor experience
E.1.20	The Applicant	**Table 18.7 final row (APP-035]** The community of Manston, particularly in the area of Preston Road, Manston; in northern section of High Street, Manston; in southern section of High Street; Manston; Jubilee Cottages on Manston Road; PRoWs TR8, TR9, TR10 and TR22; Manston Court Caravan Site and Preston Parks are assessed to have significant daytime inter-related noise and visual effects during the operational phase of the Proposed Development, in both shared open spaces and indoor spaces. **i. What mitigation is proposed to mitigate noise and visual effects in shared open spaces?** **ii. What mitigation is proposed for the interior spaces of the caravans at Manston Court Caravan Site?**
		Applicant's Response: i. The Noise Mitigation Plan [APP-009] proposes measures which will avoid significant adverse effects of noise, mitigate and minimise adverse effects of noise, and where possible provide improvements. It should be noted that the absolute noise level in shared open spaces cannot be practicably mitigated as the noise source is overhead and the nature of any such spaces is that they are outdoors. Nonetheless whilst no additional noise mitigation has been proposed for shared open spaces, the establishment of a community trust fund is required under the dDCO [APP-006]. This will allow funding of community projects to be implemented by the Community Consultative Committee. ii. The Noise Mitigation Plan [APP-009] commits to providing a noise insulation scheme to residential properties exposed to aircraft noise levels in excess of 63 dB $L_{Aeq,16hr}$ (daytime) and / or 55 dB $L_{Aeq, 8hr}$ (night time). Manston Court Caravan Site is forecast to be exposed to noise levels less than these thresholds in all years assessed and presented in Chapter 12 of the

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		ES [APP-034]. Hence no significant effects is anticipated which would require the provision of noise insulation. No further mitigation is proposed for the interior spaces at Manston Court Caravan Site.
E.1.21	The Applicant	**Location** A number of the application documents (for example, the Statement of Reasons [APP-006, 6.6]) describe the location of the Proposed Development as such: *"The town of Margate lies approximately 5km to the north of the site and Ramsgate is approximately 4km to the east. Sandwich Bay is located approximately 4-5km to the south east."* The RR from Jane Roberts [RR-0743] states that houses start at just 1.3km from the runway. **Clarify the distance in relation to the nearest built up areas in terms of distance from the edge of the runway.**
		Applicant's Response: The distances cited above are approximate as is often the case in the introductory paragraphs of documents and chapters of an ES. In each case the distance from the nearest edge of the runway to the closest house is as follows: • Margate- 3.85km from edge of runway to nearest property. To rail station - 4.91km. • Ramsgate- 1.29km from edge of runway to nearest property. To rail station - 2.8km. • Sandwich Bay (Sandwich Flats)- 2.8km to the closest point of the reserve from the edge of the runway (not a built up area). • Pegwell Bay - 1.38km to the closest point of the reserve from the edge of the runway (not a built up area).
F.1 Funding and resources		

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F.1.1	The Applicant	**The Undertaker and availability of funds** The Applicant's attention is drawn, in particular, to the Relevant Representations from Jane Lee-Hopkinson [RR-0742], Gary Lewis [RR-0580]. **The ExA invites the Applicant to comment on the statements contained in there RRs.** **NOTE**: In responding to this question, the Applicant should note that some of the content of these RRs has been redacted and should take this into account in responding.
		Applicant's Response: The events alluded to occurred over 25 years ago and are not relevant to this application. The Applicant is a Special Purpose Entity whose only function is to receive money from its investors and use that money to pay fees in support of the DCO process. Any representation that any of the partners have arbitrarily loaned themselves money from the entity is false. Having spent over £13,000,000 on this project to date, the Applicant has shown long-term commitment to this project and of course has a business model. Investors would not have expended £13 m without knowing how they could expect to earn a return. A summary of the Applicant's business model is provided at Appendix F.1.5 in TR020002/D3/FWQ/Appendices.
F.1.2	The Applicant	**The Undertaker and availability of funds** **Provide full details, including audited accounts, for any companies, bodies or undertaking wholly or partly owned by RiverOak Strategic Partners Limited.**
		Applicant's Response:

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		The Applicant, RiverOak Strategic Partners Limited, has three subsidiary companies: RiverOak Operations Limited, RiverOak AL Limited and RiverOak Fuels Limited. Please find attached at Appendix F.1.2 in TR020002/D3/FWQ/Appendices the financial statement for RiverOak Operations Limited filed with Companies House in April 2018. The Applicant and its subsidiaries RiverOak AL Limited are non-trading companies and as such, have not been audited. RiverOak Fuels Limited does not yet have audited statements as it was incorporated in July 2018.
F.1.3	The Applicant	**The Undertaker and availability of funds** The Funding Statement [APP- 013] states in paragraph 19 that: "*Through its joint venture agreement, RiverOak is able to draw down these two categories of funding (£7.5m land acquisition and £5.6m noise mitigation measures) when required*." **Provide a copy of the joint venture agreement showing who is party to the agreement.**
		Applicant's Response: Due to the restructuring mentioned in the cover letter submitted at Deadline 1 (TR020002/D1/Cover), which is still in progress, there is no longer a Joint Venture agreement. Details of the new structure will be provided as soon as possible..
F.1.4	The Applicant	**The Undertaker and availability of funds** The Funding Statement [APP- 013] states in paragraph 23 that:

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		"To meet the capital costs of construction, RiverOak will select one or more funders from amongst those who have already expressed interest and others that are likely to come forward, to secure the best deal for constructing and operating the project." **i. Name those funders who have expressed interest and show audited proof of assets; and/or** **ii. Provide other evidence to demonstrate that there is a reasonable prospect of the requisite funds for constructing and operating the project becoming available.**
		Applicant's Response: ii. Although the identity of the funders who have expressed interest remains confidential at this stage, the Applicant is able to describe them in the following terms. **Investor 1.** This institutional investor has a global reach in terms of both the ownership of airport infrastructure, and aviation related assets, namely aircraft leasing, engine manufacturing, and avionics technology development. They are joint venture collaborators with all global air frame manufacturers, and are conversant and agreeable with the future requirements of airport capacity in the world's major population centres, particularly the south east of the UK. This investor has in-house assets both on their own balance sheet, but also on a third party assets under management of in excess of $500 billion. **Investor 2.** The Applicant has had detailed discussions with a publicly listed global infrastructure institution, which owns and operates a number of major airports in Asia, and has co-invested and participated in numerous financings of airports in the US. This particular investor is keenly interested in expanding its presence into the UK and Europe, and has been involved in the

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		evaluation of our development plans for Manston since very early in the process. This entity has a market capitalization in excess of $150 billion. **Investor 3.** This investor is a UK based asset management company with annual revenues of almost £3 billion and responsible for over £400 billion on behalf of its clients This investor has a major mandate to diversify and seek to support investments into the development of UK infrastructure, and Manston fits its criteria. They have been tracking the Applicant's progress both with the DCO application and the details of the scale of proposed development at Manston. **Investor 4.** The Applicant has had significant ongoing dialogue with this global private family investment entity. This diversified investment vehicle has extensive interests already in airport and strategic infrastructure assets, and again, have been involved in reviewing and advising on our business case and the thesis we have proffered on Manston from very early on in our investment review. This family office has known assets valued in the region of $25 billion. **Investor 5.** The Applicant has strategic relationships with smaller private groups with extensive specific experience in certain sectors that will have good value to the future success of Manston. These groups have partnered with directors of the Applicant previously in other infrastructure investments both in terms of brownfield redevelopment and ground up data centre infrastructure development. One such has executed, in the last three years, the ground up conception, planning approval, construction and delivery, as lead developer, of two major office projects in London with the aggregate value in excess of £700m. One of these projects has since been sold to a major Asian investor for pricing in excess of £330m. **Investor 6**

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		This investor is a global security services group with assets of over £4 billion and annual revenues of £8 billion." They have expressed a strong interest in participating in the airport project and in investing in fire and security infrastructure. **Underwriting and capital markets:** The Applicant has broad based relationships, both with buy-side institutional investors themselves, but also with the underwriting and financial instrument placement community, both in the US and Europe. The Applicant in the process of reviewing proposals from a number of global investment banking firms on the structuring of financing both equity and debt, for the successful completion of the development plans our scheme proposes under the DCO. These discussions are ongoing and very detailed, and display not just the specific breath of relationships that the Applicant itself has for sourcing funding capital, as outlined above, but the major interest globally by institutional investors, both in terms of infrastructure as a whole, but even specific to Manston, despite the concerns of Brexit on the UK trade and economic outlook. It should be noted that one of the reasons for the confidentiality of the identities of the investors above derives from earlier attempts to secure Manston by CPO via the local authority. The Applicant previously provided detailed letter-headed correspondence from major global financial investors as to their interest in participating in the Manston project. This correspondence found its way into the public domain to the consternation of the authors who had requested that it be treated as commercially sensitive. The Applicant here reiterates the level of detail on funding that is referred to in statute and guidance. The statutory requirement in regulation 5 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) is that where a DCO would authorise the compulsory acquisition of land, the application should be accompanied by "*a statement of reasons and a statement to indicate how an order that contains the authorisation of compulsory acquisition is proposed to be funded". This statement should provide as much information as possible about the resource implications of both acquiring the land and implementing the project for which the land is required."* The clear implication from the statute is that where compulsory acquisition forms part of the DCO, the applicant must include a statement explaining how that acquisition will be funded. The statutory requirement must be given priority over the non-

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		statutory guidance which appears, in the extract set out above, to go further than the statutory requirements and require a funding statement to cover not only the costs of the acquisition but the resource implications of the project as a whole. In fact, the guidance does not contain an absolute requirement to establish the funding available to cover total project costs, but rather seeks "*as much information as is possible"* about the "*resource implications"* of implementing the project, recognising that the information that it is possible to provide may vary across different projects. The 2013 guidance also refers to the further guidance available in Circular 06/2004 which explains that "*A general indication of funding intentions, and of any commitments from third parties, will usually suffice to reassure the Secretary of State that there is a reasonable prospect that the scheme will proceed".*
F.1.5	The Applicant	**Resource Implications** – **Implementation of the project** The Applicant is reminded that that DCLG Guidance related to procedures for the compulsory acquisition of land (DCLG (2013) Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land, April) states that: *"Any application for a consent order authorising compulsory acquisition must be accompanied by a statement explaining how it will be funded. This statement should provide as much information as possible about the resource implications of ... implementing the project for which the land is required."* **Provide a copy of any business case and/or plan which forms any part of the basis for estimating the net cost of implementing the project.**
		Applicant's Response: A summary business model is attached at Appendix F.1.5 in TR020002/D3/FWQ/Appendices, representing a high-level, 20-year operating income statement for the airport. Major revenue categories include cargo handling fees, airside and landside rents, aircraft landing revenues and fuel revenues. Given that airports are labour-intensive, direct costs include the personnel costs of handling freight, staffing the control tower, providing security, fire control, maintenance and passengers operations.

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		Indirect costs are the overhead costs required to keep the airport operating including all utility costs, property rates, administrative costs, insurance costs and others.
F.1.6	The Applicant	**Resource Implications – Implementation of the project** The Applicant is reminded that that *DCLG Guidance related to procedures for the compulsory acquisition of land* (DCLG (2013) Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land, April) states that: *"Any application for a consent order authorising compulsory acquisition must be accompanied by a statement explaining how it will be funded. This statement should provide as much information as possible about the resource implications of ... implementing the project for which the land is required."* **Resource Implications – Implementation of the project** The Funding Statement [APP- 013] states in paragraph 15 that: *"RiverOak has taken expert advice from RPS on the cost estimate for the project that is the subject of the application. The initial phase of the project, which will bring the airport back into use, is estimated to cost about £100 million. The cost of developing the remaining phases of the project over a 15-year period is estimated to be an additional £200 million, i.e. a total of £300 million."* i. Show where in the application documentation the detailed costings used to arrive at this figure are to be found; or ii. Set out the assumptions and broad estimates of the costs of the different elements of the proposed scheme that underlie this estimate of £300 million.
		Applicant's Response:

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		ii. The Applicant has attached its Capital Expenditure budget of £306m at Appendix F.1.6 in TR020002/D3/FWQ/Appendices. The chart depicts both the Applicant's and its masterplanning consultant RPS's high level cost projections for the proposed capital expenditure (CapEx) plan for Manston. This CapEx scheme is currently proposed to be phased over 15 years. The total expenditure (including a 10% contingency) equals just under £306m, consistent with the figure of £300m in the Funding Statement [APP-013]. However it should be noted that following a more detailed analysis the level of expenditure to bring the airport back into use is a greater share of the £300m than stated in the funding statement, i.e. £186m rather than £100m.
F.1.7	The Applicant	**Resource Implications** – **Implementation of the project** *Paragraph 11 of the Funding Statement [APP-013] states that:* *"RiverOak anticipates that it will raise further equity and debt finance following the making of the DCO in order to develop the authorised development to completion.*" The ExA notes the use of the word "*anticipates*". **i. Provide evidence of your ability to raise further equity and debt finance following the making of the DCO in order to develop the authorised development to completion; and** **ii. Provide an evidenced estimation of the probability of doing so.**
		Applicant's Response: i. The directors of the Applicant have had extensive career experience in the financial capital markets and infrastructure project finance, in terms of equity and debt financings, both in New York and London. On a macro overview, the extent of equity capital raised amongst the directors is in excess of $1.0 billion, for a variety of infrastructure and longer term asset funds and redevelopment projects. In addition, many of these project finance

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		investments have had a hands on operational / management involvement and strategic implementation strategies for asset repurposing. One of the directors has spent the formative years of his career in the US Public Finance / Municipal Capital Markets, which entailed raising significant new money and debt refinancing of airport infrastructure across the United States. These debt financing projects included the funding / development of freight facilities, passenger terminals, on-apron aviation fuel storage holding tanks, runway extensions, multi-story passenger parking garages and MRO / aircraft hangar and engineering infrastructure. The Applicant, specific to Manston over the previous number of years, has been willing to invest significant risk capital on the back of numerous discussions with long term institutional funding partners, both in terms of future equity requirements, and debt financing instruments to construct the necessary new infrastructure to meet the required capacity demands, both in terms of the DCO qualifications, but also in accordance with commercial business planning with potential end user entities such as air freight carriers, integrators, freight forwarders and digital retail platforms. ii. The probability of raising this finance is considered to be very high. The Applicant's canvassing of both the long term infrastructural financing community and the broad range of different end users has granted it significant confidence that the repurposing of Manston will be a long term viable addition to the UK's economic and trade sectors. As set out in answer F.1.4 above, there is significant interest in further investment beyond that which has already been secured. In addition to pure at-risk capital the Applicant has expended to outline its scheme of redevelopment under the DCO process, it has interacted with commercial banking institutions, UK and US pension fund investors, the investment departments of potential end users and a series of Asian infrastructure groups with existing airport ownership and operating assets.
F.1.8	The Applicant	**Resource Implications** – **Acquiring the land**

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		The Applicant is reminded that that DCLG Guidance related to procedures for the compulsory acquisition of land (2013) states that: "*Any application for a consent order authorising compulsory acquisition must be accompanied by a statement explaining how it will be funded. This statement should provide as much information as possible about the resource implications of ... acquiring the land ....*" The Funding Statement [APP- 013] states in paragraph 16 that: *"...RiverOak has obtained advice from surveyors CBRE that the total cost of acquiring the necessary land for the project at its value in the 'no-scheme world', the basis upon which compensation for compulsory acquisition is calculated, as no more than £7.5 million."* The ExA notes that Article 9 - Guarantees in respect of payment of compensation, etc in the dDCO [APP-006] proposes guarantees in respect to this sum. **i. Show where in the application documentation the detailed costings used to arrive at this figure are to be found; or** **ii. Set out the assumptions and estimates of the costs of the different elements that underlie this estimate of £7.5 million.**
		Applicant's Response: ii. The Applicant has not included detailed costings in the application documentation. The Examining Authority will be aware that the overwhelming majority of the land is held by Stone Hill Park Limited, with a number of additional parties affected, and for reasons of commercial confidentiality and sensitivity the Applicant considers it inappropriate to provide a breakdown of different elements as they may be assigned to individual land holdings.

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		The Applicant's property cost estimate is founded on the statutory compensation code position in the 'no scheme world' and with appropriate planning assumptions made. The Applicant's surveyors CBRE have given due regard to the market evidence available at the date the estimate was provided. The heads of claim being the Land Compensation Act 1961 at section 5 (namely Rule 2 - market value and Rule 6 – disturbance) together with the Compulsory Purchase Act 1965 at Section 7 (namely severance and injurious affection). The Applicant's estimate also anticipates any claimants' reasonably incurred fees and costs are included as part of Rule 6 compensation and allowance has also been made for statutory loss payments. In respect of some aspects of the scheme, for example the underground pipeline, the Applicant has incorporated the notion of betterment in its property cost estimate as it is acquiring the subsoil only that contains an asset which does not have any certain legal owner at present. The Applicant, in acquiring this asset, would assume the responsibility and liability for its maintenance and repair.
F.1.9	The Applicant	**Resource Implications** – **Noise Mitigation Plan** Paragraph 18 in the Funding Statement [APP- 013] shows costs in relation to the Noise Mitigation Plan that: *"Implementation of insulation policy and Part I claims: £4m (up to 1000 properties at £4000 each); and* *Implementation of relocation policy: £1.6m (up to eight properties)."* The ExA notes that this totals £5.6m. **i. Show where in the application documentation the detailed costings used to arrive at these figure are to be found; or** **ii. Provide details of the costings of elements of the estimates underlying the costing of £5,600,000.** **iii. Show where the availability of this sum is subject to any form of guarantee in the dDCO [APP-006].**
		Applicant's Response:

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		ii. The Applicant has not included detailed costings in the application documentation. The Applicant estimated a sum of £4,000 per property towards acoustic insulation having considered noise insulation assistance schemes at other airports in the UK. For example, it is the Applicant's understanding that Manchester Airport offers up to £2,000, Gatwick Airport offers up to £3,000, and Heathrow Airport is proposing up to £3,000 in its outer zone affected by the planned new runway. The Applicant believes that its offer is generous in this context. The costing of potential Part 1 Land Compensation Act 1973 claims has been calculated based upon a robust estimate that such claims are typically in the region of 1% of value, and a generous assumption has been made of an average value of £400,000 per dwelling. Assumptions have also been included in respect of betterment to value arising as a result of the commercial success of the Proposed Development with consequential strengthening and support for housing locally. By its nature the impact of aircraft noise and effect, if any, on residential properties is hard to predict with precision. It is dependent on various factors including flight paths and wind direction and noise can be dispersed accordingly. The Applicant's approach has been to provide an estimate based on valuation advice from CBRE's advice as to sustainable claims that may be made and the potential risk that properties would have to be relocated. The justification for a combined figure of £4m (for insulation and Part 1 claims) is that any sustainable Part 1 claim (where the Applicant has estimated a value of £4,000 per dwelling) is likely to be negated if an application had been submitted, and payment made, of £4,000 separately under the Applicant's proposed noise insulation scheme. As the greatest potential impact from the operation of the airport would be noise it is reasonable to assume that the majority of sustainable Part 1 claims, if any, would be nullified where payment is made to an eligible property for acoustic insulation. The costing of the relocation element has been calculated based on the value of eight properties at £200,000 each (total £1.6m). iii. The sum is secured through Article 9 of the dDCO, and updated version of which has been submitted for Deadline 3 (TR020002/D3/2.1) to include noise mitigation payments not covered by land compensation alone.
F.1.10	The Applicant	**Resource Implications - blight**

Ref No.	Respondent	Question
		The Applicant is reminded that DCLG Guidance related to procedures for the compulsory acquisition of land (2013) advises at paragraph 18 that the resource implications of a possible acquisition resulting from a blight notice have been taken account of. The Funding Statement [APP- 013] states in paragraph 20 that: *"In some circumstances, landowners can make blight claims once the application has been made but before it is decided. Statutory blight is triggered once an application for a DCO has been made, pursuant to paragraph 24(c) of Schedule 13 to the Town and Country Planning Act 1990. The three categories of land to which this applies are small businesses, owner-occupiers and agricultural units. CBRE advise that there is no land subject to compulsory acquisition under this application in any of these categories. Nevertheless, RiverOak is has set aside funding for potential blight claims out of an abundance of caution and have drawn down £500,000 from their investors at the time of making the application in case any claims are successfully made."* **i. Show where in the application documentation the detailed costings used to arrive at this figure are to be found; or** **ii. Provide details of the costings of elements of the estimates underlying the figure of £500,000.** **iii. Show audited evidence that RiverOak has assets of at least £500,000.** **iv. Provide full details, including current audited accounts, of the investors cited in this paragraph.** **v. Show where the availability of this sum is subject to any form of guarantee in the dDCO [APP-006].**
		Applicant's Response: ii. The Applicant has obtained advice from CBRE to the effect that no claims in blight are likely to be successful, given the land concerned and the eligibility criteria, but that this amount should be set aside as a precaution. iii. The Applicant will provide evidence that its accountants hold £500,000 on its behalf as soon as possible.

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		iv. As explained in Enclosure 2 to the Applicant's Deadline 1 cover letter [REP1-001], restructuring is currently taking place and so the identity of the investors mentioned in the Funding Statement is no longer relevant. v. This figure is encompassed in the overall land compensation figure which is the subject of a guarantee in article 9 of the dDCO, as it is merely being paid earlier than it would have done had the Applicant acquired the land after the granting of the DCO.
F.1.11	The Applicant	**Potential shortfalls** The Applicant is reminded that DCLG Guidance related to procedures for the compulsory acquisition of land (2013) advises at paragraph 17 that the Applicant should provide an indication of how any potential shortfalls are intended to be met. Figures in the Funding Statement [APP- 013] show the estimated capital cost of the scheme as being £300m. Figures in the Funding Statement show the estimated potential combined cost of compulsory acquisition, the Noise Mitigation Plan and blight to be £13.6m. A letter from PWC AG appended to the funding statement refer to assets of £15m. **Show how the shortfalls in funding are intended to be met and by whom.**
		Applicant's Response: The Applicant will submit an updated funding statement as soon as the restructuring mentioned in the Deadline 1 cover letter (REP1-001) is complete, which will address how any shortfalls would be met.
F.1.12	The Applicant	**Timing of availability of funds**

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		The Applicant is reminded that DCLG Guidance related to procedures for the compulsory acquisition of land (2013) advises at paragraph 18 that applicants should be able to demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following the order being made. **Demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following the order being made.**
		Applicant's Response: The updated funding statement to be provided once the restructuring is complete will demonstrate that adequate funding is sufficiently likely to be available to enable compulsory acquisition to take place within the statutory period following the order.
F.1.13	The Applicant	**Guarantee** The ExA notes that Article 9 - Guarantees in respect of payment of compensation, etc in the dDCO [APP-006] proposes guarantees in respect to £7.5m. Figures in the Funding Statement [APP- 013] show the estimated potential combined cost of compulsory acquisition, the Noise Mitigation Plan and blight to be £13.6m **Justify the figure of £7.5m in Article 9 of the dDCO [APP-006].**
		Applicant's Response: The £7.5m sum guaranteed in Article 9 of the dDCO related to the cost of compulsory acquisition (including blight). The revised version of the dDCO being submitted for Deadline 3 [TR020002/D3/2.1] has increased this figure to £13.1m to include the additional cost of implementing the Noise Mitigation Plan proposals. The sum of £13.6m referred to in the

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		question appears to have added £500,000 for blight when that sum was already included in the £7.5m and should be a total of £13.1m.
F.1.14	The Applicant	**Guarantee** The ExA notes that Article 9 - Guarantees in respect of payment of compensation, etc in the dDCO [APP-006] proposes guarantees in respect to £7.5m. **Demonstrate how Article 9 of the dDCO (APP-006] provides sufficient security for individuals in consideration of the provisions of the Human Rights Act 1998.**
		Applicant's Response: The Applicant explains in section 13 of the Statement of Reasons [APP-012] why it considers that its application complies with the European Convention on Human Rights and the Human Rights Act 1998. In the final sentence of paragraph 13.4 the Applicant states that "those affected by the exercise of compulsory acquisition or temporary use powers will be entitled to compensation and [the Applicant] has the resources to provide such compensation." Article 9 obliges the undertaker to demonstrate the existence of those resources before commencement of the Proposed Development. The article provides that the Proposed Development cannot be commenced until security of £13.1m has been provided in respect of the liabilities of the undertaker to pay compensation under this Order and the Secretary of State has approved the security in writing. Article 9 therefore provides a commitment from the undertaker to back up the claim made in the final sentence of paragraph 13.4 of the Statement of Reasons. This forms part of the Applicant's justification that interference with European Convention rights secured by the Human Rights Act 1998 is justified and proportionate.
F.1.15	The Applicant	**Cost efficiency and sustainability**

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		The Planning Statement [APP-080] states in paragraph 6.47 , with reference to the Airports NPS, that: *"Paragraph 4.39 states that the applicant should demonstrate in its application that its scheme is cost efficient and sustainable, and seeks to minimise costs to airlines, passengers and freight owners over its lifetime. Whilst this is relevant primarily to the Heathrow Northwest Runway, RiverOak have set out the relevant details applicable to their scheme in the Funding Statement provided with the DCO."* **Show where and in what ways the Funding Statement (APP- 013] demonstrate the proposed scheme is cost efficient and sustainable, and seeks to minimise costs to airlines, passengers and freight owners over its lifetime.**
		Applicant's Response: The Planning Statement [APP-080] notes that paragraph 4.39 of the Airports NPS is relevant primarily to the Heathrow Northwest Runway proposal. Indeed, most of the section within the NPS that deals with 'Costs' specifically relates to Heathrow Airport especially paragraphs 4.37 and 4.38. Cost is a particularly important issue for the Heathrow Northwest Runway proposal because of concerns that have been expressed about Heathrow's ability to raise the money to fund the scheme and fears that passengers and taxpayers might somehow need to contribute. In contrast, the costs of implementing and constructing the Manston DCO project plus the costs of acquiring necessary rights over the land is not dependent on any public funding, Government subsidy or guarantee, or any access to borrowing or grants from UK or European funds (paragraph 21 of the Funding Statement, APP-013). Consequently, the relationship between cost and affordability is much more relevant to the assessment of the Heathrow Northwest Runway proposal. The NPS recognises in paragraphs 4.36 and 4.37 that funding of airports is subject to economic regulation by the Civil Aviation Authority (CAA). Following any grant of the DCO, the operating arm of Applicant will comprise professionals with operational experience in aviation and costs will be controlled/regulated to the satisfaction of the CAA. The Applicant recognises the vital role of the aviation regulatory community in delivering this project and ensuring that regulatory compliance is achieved. The airport operator will have to obtain an Aerodrome Licence and this licence can only be obtained through the engagement of suitably qualified and experienced personnel (SQEP) at all levels of the Airport's operational

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		management and it is the responsibility of the CAA to ensure that the holders of an Aerodrome Licence are financially and operationally competent and suitable persons to exercise the privileges of that licence. Paragraph 4.40 of the NPS recognises that the CAA is a statutory consultee for all proposed applications relating to airports or which are likely to affect an airport or its current or future operation. The same paragraph states that the Applicant is expected to provide the CAA with the information it needs to enable it to assist the Examining Authority in considering whether any impediments to the Applicant's development proposals, insofar as they relate to the CAA's economic regulatory and other functions, are capable of being properly managed. RSP has consulted with the CAA throughout the preparation of the DCO application. The CAA has not made any specific requests for any financial information. The requirement to demonstrate that the Proposed Development is cost efficient and sustainable, and seeks to minimise costs to airlines, passengers and freight owners over its lifetime is not therefore directly applicable to the determination of this DCO application. However, cost efficiency and sustainability are important themes that underpin proposed development. The Manston Airport project proposes the reuse of an existing airport including the reuse of key airport related infrastructure which already exists including a runway which is in good condition, and which is protected and promoted for aviation use, expansion and diversification in saved policies in the Thanet Local Plan 2006. The Proposed Development truly embodies a sustainable form of development which is translated into the cost estimates for the project which will ultimately benefit costs to airlines, passengers and freight handlers using the airport. The cost estimate for the Manston Airport project includes the cost of implementing the project, the cost of construction and funding the acquisition of the necessary rights over land. Cost-efficiency and sustainability considerations have underpinned the cost-estimates which have been prepared by aviation experts. The Business Model is predicated on being able to offer airport users competitive terms. The costs have been shared with, and have attracted, significant interest from various interested institutional investors including entities with extensive broad-based aviation investments, in terms of aircraft leasing portfolios, but also those with extensive airport infrastructure interests combining investment ownership, airport management, airport construction, expansion and airport masterplanning. This significant interest would not exist unless the investors deemed the cost estimates to be cost-efficient and sustainable.

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F.1.16	The Applicant	The Airports NPS (new runway capacity and infrastructure at airports in the South East of England, June 2018) refers in paragraph 4.37 to the fact that the CAA has granted an economic licence to the operator of Heathrow Airport to levy airport charges. This licence sets a maximum yield per passenger that can be recovered by the operator of Heathrow Airport through airport charges. **Are you applying for, or expect to be granted, a similar economic licence?**
		Applicant's Response: No. Airports in the UK are subject to regulation by the CAA and must apply for an operating licence under the Air Navigation Order 2009 if they are to be allowed to accept specified flights for the purpose of public transport (which include passenger and air cargo) or for the purpose of instruction in flying, as these can only take place only at a licensed aerodrome or a Government aerodrome. In common with other commercial airfields, the Applicant will be seeking a public (as opposed to an ordinary or private) operating licence and once Manston's annual turnover has exceeded £1m for two years, it will be eligible to apply to the CAA for recognition as a statutory undertaker and in so doing come under the economic as well as operational regulation of the CAA. There are currently over 50 airports in the UK subject to economic regulation, including a number in Northern Ireland under specific, parallel regulations and ten in the Highlands and Islands of Scotland. Regulation is of two significantly different kinds, which may be described as 'light' and 'heavy'. The latter is restricted to a small number of airports in the UK (Heathrow, Gatwick, Stansted and Manchester) which qualify as 'designated' airports by having significant market power in their geographical catchments and thus having the potential that market power unfairly to their commercial advantage. It is this *heavier* regulatory regime (recently updated in the Civil Aviation Act 2012) under which Para 4.37 of the Airports NPS highlights the operator of Heathrow Airport has been granted a licence to levy airport charges. The re-development of Manston Airport in the form being sought via this DCO application is considered highly unlikely to result in a dominant market position within the South East of England or the wider air cargo sector in the UK and is not anticipated to need a similar licence. It will, however apply for a certificate in relation to the status of the airport operator as

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		a statutory undertaker under Section 57A of the Airports Act 1986 (as introduced by Section 76(3) and Schedule 8 Part 1 of the Civil Aviation Act 2012) as soon as it is eligible to do so.
F.1.17	The Applicant	The ExA has noted the advice contained in paragraph 4.40 of the 2018 Airports NPS that: *"Detailed scrutiny of any business plan put forward by the licence holder will fall under the CAA's regulatory process under the Civil Aviation Act 2012, and the detailed matters considered under that process are not expected to be scrutinised in the same way during the examination and determination of an application for development consent."* This paragraph goes on to state that: *"The applicant is expected to provide the CAA with the information it needs to enable it to assist the Examining Authority in considering whether any impediments to the applicant's development proposals, insofar as they relate to the CAA's economic regulatory and other functions, are capable of being properly managed."* **Provide a list of the information provided to the CAA in this respect.**
		Applicant's Response: The Applicant has not yet commenced the CAA's regulatory process under the Civil Aviation Act 2012. The start of the certification and licensing application is expected in the latter part of 2019; that business plan (setting out funding and resourcing) will be part of this application. However, a business model is included at Appendix F.1.5 in TR020002/D3/FWQ/Appendices.
F.1.18	The Applicant	The Statement of Reasons [APP-012] contains a number of references (eg at paragraphs 5.9.1, 5.9.2, 5.9.6, 5.9.7, 5.9.9) to provisions under which parties may be entitled to compensation. **Show where provision has been made for this in the calculation of the costs of the project.**

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		Applicant's Response: Provision has not specifically been made for these items, which relate to street works, protective work to buildings and occupation of land during the five-year maintenance period. The Applicant has taken advice from CBRE to the effect that any compensation payable under these heads of entitlement would be of low amounts and would therefore be covered by the overall total previously given of £7.5m.
H.E.1 Historic Environment		
HE.1.1	The Applicant	**Listed Buildings** Table 9.1 of the ES, Volume 1, Chapter 9 [APP-033] states that the Planning (Listed Buildings and Conservation Areas) Act 1990 (the Act) is addressed within the ES by "*there are no listed buildings on the site*". However, the Act covers listed buildings and their settings. The Secretary of State is required to have special regard to the desirability of preserving the setting of a listed building. **Do you have any further comments on this matter?**
		Applicant's Response: The statement that "there are no listed buildings on the site" is provided in a discussion of the baseline and is provided for information. Impacts on the setting of heritage assets have been considered at section 9.10 of the Environmental Statement (APP-033).
HE.1.2	The Applicant	**Conservation Areas**

Ref No.	Respondent	Question
		Table 9.15 in Chapter 9 of Volume 1 of the ES [APP-033] states that the magnitude of change to the conservation areas of Acol and Minster resulting from the proposal would both be 'negligible'. **i. With reference to paragraphs 5.198-5.205 of the 2018 Airports NPS, do you consider that such effect would result in less than substantial harm to the significance of the heritage assets?** **ii. If so, could you direct the ExA to a summary of the public benefits of the scheme in your view?**
		Applicant's Response: i. A separate paper is provided at Appendix HE.1.2 in TR020002/D3/FWQ/Appendices summarising the assessment of harm in the terms required by Paragraphs 5.198 – 5.205 of the Airports NPS. The ES concluded that a change of negligible magnitude to these conservation areas would not result in substantial harm. Following the effect criteria set out at Table 9.13 of the ES (APP-033), which defines a negligible magnitude of change as 'Minor alteration of an asset which does not affect its significance in any discernible way' the Applicant confirms that any such change would result in less than substantial harm to the significance of the heritage assets (conservation areas). ii. The public benefits of the Proposed Development in the terms described in the Airports NPS are primarily addressed in the Planning Statement (APP-080) which itself draws upon information within the ES as well as the wider suite of application documents. As noted above, for the purposes of this question a separate paper has been produced (Appendix HE.1.2) outlining the public benefits which outweigh the harm identified to heritage assets.
HE.1.3	The Applicant	**Conservation Areas** Figure 9.5 of the ES [APP-040] shows that the St Nicolas at Wade Conservation Area would be located on the approaches flight path to the west of the airport.

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		What effect, if any, would this have in your view on the character and appearance of this conservation area?
		Applicant's Response: St Nicholas at Wade was not identified in consultation with relevant stakeholders as being subject to potential visual change arising from the Proposed Development as a result of its distance from the proposed site. The effects of aviation noise were considered in line with the Historic England Aviation Noise Metric and a scoping appraisal of the potential effects of the Proposed Development on the significance of the St Nicholas at Wade Conservation Area is set out at Table E.3 of Appendix 9.1 of the ES (APP-051). This concluded that 'This area lies entirely within the N60>20 contour but outside the 54dB LAEq contours. While this is a rural village, predicted noise levels would be insufficient to give rise to perceptual change to the setting of the assets and would consequently not affect heritage significance.' This heritage asset was consequently not considered to require further detailed assessment in the main body of the ES as no likely significant effects are anticipated.
HE.1.4	The Applicant	**Conservation Areas** Paragraph 9.6.18 of the ES, Volume 1, Chapter 9 [APP-033] identifies Ramsgate Conservation Area as potentially subject to significant adverse indirect effects. However, Table 9.15: Assessment of effects arising through change to setting of designated heritage assets, does not include an assessment for Ramsgate Conservation Area. **Detail the effects that you consider the proposed scheme would have on the character and appearance of the Ramsgate conservation area.**
		Applicant's Response: An initial scoping appraisal of the potential effects of the Proposed Development on the significance of the Ramsgate Conservation Area is set out at Table 5.1 and Table E.3 of Appendix 9.1 of the ES (APP-051). Table 5.1 noted with regard to visual effects that '*Visibility between all of these conservation areas and the airfield is obscured by topography, vegetation*

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		and the built environment... As settlements, they produce light pollution. This is greater in the larger settlements of Ramsgate and Broadstairs. Changes to the proposed site should have no effect on the setting of these assets'. Table E.3, considering the effects of aviation noise noted that '*Ramsgate conservation area comprises the historic core of a busy resort and port town. In the majority of the area, the existing soundscape is provided largely by traffic noise with occasional noise from harbour and marina operations, which reinforce the area's historic and functional links with the sea. The majority of this area is not sensitive to altered levels of background noise, and the noise relating to port operations would not be affected by the relatively low noise levels predicted. Consequently, aviation noise is not considered likely to give rise to any perceptual change in the setting of the area and no adverse effects are anticipated*.'
HE.1.5	The Applicant Historic England	**Heritage Action Zone** The Heritage Action Zone in Ramsgate looks to achieve economic growth by using the historic environment as a catalyst. **What effect, if any do, you consider the scheme would have on aims of the Heritage Action Zone?**
		Applicant's Response: The Heritage Action Zone (HAZ) is not a heritage asset within the definitions set out by ANPS or NPPF, and is instead identified as an area where heritage assets are used as a focus for economic regeneration. Effects on heritage assets, as defined by the Airports NPS, within the HAZ have been assessed as set out in ES Chapter 9 Historic Environment (APP-033) in line with the agreed scope and methodology for historic environment assessment and no significant adverse effects were identified.
HE.1.6	The Applicant	**Scheduled Monuments**

Ref No.	Respondent	Question
		For the two identified scheduled monuments (SM) near to the site, Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] states that effects of the scheme on the SMs would be negligible. **i. With reference to paragraphs 5.198-5.205 of the 2018 Airports NPS, do you consider that such effect would result in less than substantial harm to the significance of the SMs?** **ii. If so, could you direct the ExA to a summary of the public benefits of the scheme in your view?**
		Applicant's Response: i. A separate paper is provided at Appendix HE.1.2 in TR020002/D3/FWQ/Appendices summarising the assessment of harm in the terms required by Paragraphs 5.198 – 5.205 of the Airports NPS. In this context the ES concluded that a change of negligible magnitude to these scheduled monuments would not result in substantial harm. Following the effect criteria set out at Table 9.13 of the ES (APP-033), which defines a negligible magnitude of change as 'Minor alteration of an asset which does not affect its significance in any discernible way' the Applicant confirms that any such change would result in less than substantial harm to the significance of the heritage assets (scheduled monuments). ii. The public benefits of the scheme are primarily addressed in the Planning Statement (APP-080) which itself draws upon information within the ES as well as the wider suite of application documents. As noted above, for the purposes of this question a separate paper has been produced (see Appendix HE.1.2) which identifies the relevant heritage assets, describes the extent of the harm they are likely to experience as a result of the Proposed Development and sets out the public benefits which the Applicant considers to outweigh the harm and to justify the Proposed Development notwithstanding its likely heritage impacts.
HE.1.7	The Applicant	**Listed Buildings**

Ref No.	Respondent	Question
		With reference to paragraph 5.198 of the 2018 Airports NPS how would you describe the significance of Chapel House?
		Applicant's Response: To expand on the discussion of significance set out at Table 5.1 of Appendix 9.1 of the ES (APP-051), the significance of Chapel House is primarily architectural and historical, deriving from the re-use of elements of a former chapel. The close association with an existing farmstead adds a narrative element to its historical significance, illustrating its passage from ecclesiastical to agricultural use. This historical interest is reinforced by the discernibly rural setting of the asset, although the planting to the gardens of the house screen views into the surrounding countryside. The noise environment is consistent with this rural character, although road noise from the A299 and A256 and the business use of the former farmstead contribute distinctively modern and incongruous elements.
HE.1.8	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] assessment of effect *for Chapel House states that "noise at the projected level may become intrusive at particularly quiet periods, but sustained noise exposure would not be of a sufficient magnitude to give rise to a qualitative change to the perception of the asset as a rural farmhouse."* **i. Do you consider that such exposure would affect the significance of the listed building?** **ii. If so, what would be the level of harm caused?**
		Applicant's Response: i. A separate paper is provided at Appendix HE.1.2 in Tr020002/D3/FWQ/Appendices summarising the assessment of harm in the terms required by Paragraphs 5.198 – 5.205 of the Airports NPS. In this context the ES concluded that a change of

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		negligible magnitude to this listed building would not result in substantial harm. Following the effect criteria set out at Table 9.13 of the ES (APP-033), which defines a low magnitude of change as 'Minor and short-term changes to setting which do not affect the key characteristics and in which the historical context remains substantially intact' the Applicant confirms that any such change would result in less than substantial harm to the significance of the heritage asset (listed building). The key architectural and historic characteristics are not diminished by the anticipated change to noise environment. Projected noise levels are in the region of 57dB LAEq at Year 20, and while this would represent an increase over the baseline, the existing baseline includes distinctively modern elements and does not depend on tranquillity to contribute to setting. The ES (APP-033) identifies the magnitude of change to Chapel House as of Low magnitude, which is not considered to be a significant effect. ii. The public benefits of the scheme in the terms described in the Airports NPS are primarily addressed in the Planning Statement (APP-080) which itself draws upon information within the ES as well as the wider suite of application documents. As noted above, for the purposes of this question a separate paper has been produced (see Appendix HE.1.2) outlining the public benefits of the Proposed Development together with summaries of where harm (substantial or otherwise) may occur in the context of specific heritage assets.
HE.1.9	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] description of significance and contribution of setting for Cleve Court states that the listed building has a generally rural setting but is adjacent to a modern farmyard which is in active agricultural use. **Would such a use not be expected within a rural setting?**
		Applicant's Response:

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		Active agricultural use is entirely consistent with a rural setting as acknowledged in the ES [APP-033] description cited in the question. This description of the setting of Cleve Court is provided to better characterise its specific noise environment as one that is distinctively rural but does not depend either on a sense of tranquillity or the absence of discernibly modern audible elements such as traffic noise and agricultural activity. The location of the asset adjacent to an existing road and active farmyard provides a very specific noise environment that is not definably tranquil and includes distinctively modern elements and means that the setting of the asset is not one in which tranquillity contributes to heritage significance.
HE.1.10	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] states that the grounds of Cleve Court and Cleve Lodge would fall within the 60db $_{LAeq}$ noise contour. **i. What effect would this have on any features of special architectural or historic interest which this Grade II* listed building possesses?** **ii. Would the setting of the listed building be affected?** **iii. If so, what would be the level of harm caused?**
		Applicant's Response: i. As noted in the Environmental Statement (APP-033) at Section 9.5, the predicted change would not result in any direct change to any of the features of special architectural or historic interest which this Grade II* listed building possesses. Change would be restricted to the perception of the building within its setting. ii. The change in the setting is assessed in the ES (APP-030) as of medium magnitude, defined at table 9.13 of the ES as 'Change to the key characteristics of an asset's setting, which gives rise to harm to the significance of the asset but which

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		still allows its archaeological, architectural or historic interest to be appreciated'. This effect would result from the changed noise environment altering the viewer's perception of the setting of these assets, although these assets would remain in a discernibly rural setting on the fringes of a village, and the immediate surroundings. iii. A separate paper is provided at Appendix HE.1.2 in TR020002/D3/FWQ/Appendices summarising the assessment of harm in the terms required by Paragraphs 5.198 – 5.205 of the Airports NPS. The ES concluded that a change of medium magnitude to these listed buildings would not result in substantial harm. Following the effect criteria set out at Table 9.13 of the ES (APP-033), which defines a medium magnitude of change as 'Change to the key characteristics of an asset's setting, which gives rise to harm to the significance of the asset but which still allows its archaeological, architectural or historic interest to be appreciated' the Applicant confirms that any such change would result in less than substantial harm to the significance of the heritage assets (listed buildings).
HE.1.11	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] states that Cleve Court and Cleve Lodge may qualify for the Dwelling Noise Insulation Scheme (DNIS). **i. Do you consider that such a scheme could be utilised for a listed building where alterations are tightly controlled?** **ii. If not, what are the alternatives to noise insulation for such a property to mitigate harm from noise?**
		Applicant's Response: i. Following review of the eligibility of residential properties for the DNIS, it is not considered that this scheme would apply to Cleve Court and Cleve Lodge.

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		ii. While noise mitigation measures would not be offered under the criteria set outlined in the DNIS, there are a number of interventions that could be applied to listed buildings. The suitability of these measures to individual properties would require consideration in light of the specific heritage interests of individual properties.
HE.1.12	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] describes Way House and Wayborough House as rural houses with the relatively quiet setting of the houses contributing to their significance. The assessment of effects states that noise at the projected level may become intrusive. **i. How would this affect the setting and the significance of the heritage asset?** **ii. What level of harm, if any, would such an effect cause?**
		Applicant's Response: i. The change in the setting of Way House and Wayborough House is assessed in the ES (APP-033) as of medium magnitude, defined at table 9.13 of the ES as 'Change to the key characteristics of an asset's setting, which gives rise to harm to the significance of the asset but which still allows its archaeological, architectural or historic interest to be appreciated'. The changed noise environment will alter the viewer's perception of the setting of these assets, however these assets would remain in a discernibly rural setting, and their immediate surroundings would remain visibly unchanged. ii. A separate paper is provided at Appendix HE.1.2 in TR020002/D3/FWQ/Appendices summarising the assessment of harm in the terms required by Paragraphs 5.198 – 5.205 of the Airports NPS. The ES concluded that a change of medium magnitude to these listed buildings would not result in substantial harm. Following the effect criteria set out at Table 9.13 of the ES (APP-033), which defines a medium magnitude of change as 'Change to the key characteristics of an asset's setting, which gives rise to harm to the significance of the asset but which still allows its archaeological, architectural or historic

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		interest to be appreciated'. The Applicant confirms that any such change would result in less than substantial harm to the significance of the heritage assets (listed buildings).
HE.1.13	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] states that Way House and Wayborough House may qualify for the Dwelling Noise Insulation Scheme **i. Do you consider that such a scheme could be utilised for a listed building where alterations are tightly controlled?** **ii. If not, what are the alternatives to noise insulation for such a property to mitigate harm from noise?**
		Applicant's Response: i. Following review of the eligibility of residential properties for the DNIS, it is not considered that this scheme would apply to Way House and Wayborough House. ii. While noise mitigation measures would not be offered under the criteria set outlined in the DNIS, there are a number of interventions that could be applied to listed buildings. The suitability of these measures to individual properties would require consideration in light of the specific heritage interests of individual properties.
HE.1.14	The Applicant	**Listed Buildings** Table 9.16, Volume 1, Chapter 9 of the ES [APP-033] summarises significant adverse effects on Way House, Wayborough House, Cleve Court and Cleve Lodge that would be caused by operational noise from the Proposed Development.

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		With reference to The Infrastructure Planning (Decisions) Regulations 2010 and paragraphs 5.198-5.205 of the NPS, do you consider such harm to be justified?
		Applicant's Response: The public benefits of the scheme in the terms described in the Airports NPS are primarily addressed in the Planning Statement (APP-080) which itself draws upon information within the ES as well as the wider suite of application documents. As noted above, for the purposes of this question a separate paper has been produced (see Appendix HE.1.2 in TR020002/D3/FWQ/Appendices) outlining the public benefits of the Proposed Development together with summaries of where harm (substantial or otherwise) may occur in the context of specific heritage assets and taking into account the tests in Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010.
HE.1.15	The Applicant	**Listed Buildings** Table 9.15, Volume 1, Chapter 9 of the ES [APP-033] states that Minster Abbey would experience a slight but discernible change to its setting as a result of the scheme. **Would this equate to less than substantial harm under paragraph 5.205 of the 2018 Airports NPS?**
		Applicant's Response: A separate paper is provided at Appendix HE.1.2 in TR020002/D3/FWQ/Appendices summarising the assessment of harm in the terms required by Paragraphs 5.198 – 5.205 of the Airports NPS. The ES concluded that a change of negligible magnitude to these listed buildings and scheduled monument would not result in substantial harm. Following the effect criteria set out at Table 9.13 of the ES (APP-033), which defines a low magnitude of change as 'Minor and short-term changes to setting which do not affect the key characteristics and in which the historical context remains substantially intact'

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		the Applicant confirms that any such change would result in less than substantial harm to the significance of the heritage assets (listed buildings and scheduled monument).
HE.1.16	The Applicant	**Listed Buildings** RR-1342 states "*Plains of Waterloo is a road of Georgian houses of architectural merit, it bisects Wellington Crescent – an important Georgian crescent comparable in architectural importance to the Royal Crescent in Bath. It is my belief that the high volume of flights proposed for the reopening of Manston Airport will have a deleterious effect upon the structures in this area".* **What impacts do you consider the Proposed Development would have on the listed buildings sited on the Plains of Waterloo and Wellington Crescent in Ramsgate?**
		Applicant's Response: It is not considered that the Proposed Development would give rise to harm to the significance of the Plains of Waterloo and Wellington Crescent. These assets were considered in the scoping appraisal presented at Table E.3 of Appendix 9.1 (APP-051), and were not taken forward for more detailed assessment for the reasons summarised below. The two blocks which comprise Wellington Crescent and the majority of buildings along the Plains of Waterloo are listed at Grade II, with a small number of non-designated buildings. These buildings are of high significance for architectural interest and also derive considerable historic interest from their survival as a coherent group which is illustrative of early 19th-century urban design, the development of Ramsgate as a seaside resort and of the historic links to the Napoleonic Wars as commemorated in the street names and the 'Iron Duke' public house. The setting of these structures contributes to significance primarily through close views of these assets in which their architectural and historic interests can be best appreciated, and in the case of Wellington Crescent, of views over the seafront and harbours. The baseline noise

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		environment is that of a busy urban conservation area, particularly Wellington Crescent, which is located along a principal vehicle route through the town The Proposed Development would not give rise to any change to the structure of these buildings, and would not discernibly affect any features of historic or architectural interest. Similarly, the historic links between these buildings, the growth of Ramsgate and the contemporaneous historical events from which they are named would not be affected. While there would be a discernible change in the noise environment, this would not affect the contribution of the setting of these assets to significance and no harm would arise.
HE.1.17	The Applicant	**Listed Buildings** RR-0890 and RR-0794 raise the issue of sound proofing listed buildings, considering that listed buildings would not be able to be double glazed or secondary glazed. **i. How do you consider that the Dwelling Noise Insulation Scheme would deal with potential required sound insulation improvements to other listed buildings?** **ii. If not, what are the alternatives to noise insulation for such properties to mitigate harm from noise?**
		Applicant's Response: i. It is not considered likely that the Dwelling Noise Insulation Scheme (DNIS) would apply to any of the listed buildings identified as not subject to significant adverse effects in Chapter 9 of the Environmental Statement (APP-033). Consequently, mitigation would not be offered under the terms of the DNIS. Similarly, noise mitigation would not be offered under other mitigation schemes where no significant adverse effects have been identified.

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		ii. In any event, there are a number of interventions that would not affect the structure or appearance of listed buildings and could be applied. The suitability of these measures to individual properties would require consideration in light of the specific heritage interests of individual properties.
HE.1.18	The Applicant	**Listed Buildings** RR-1095, RR-0881 and RR-0995 all raise concerns over possible impacts on the structure of listed buildings caused by vibration from passing cargo plans. **What impact do you consider that flights would have on listed buildings in terms of disturbance and vibration?**
		Applicant's Response: It is not considered likely that vibration would give rise to structural damage to any heritage assets. The Aviation Noise Metric does not consider structural damage arising through vibration, noting that vibration is extremely unlikely to give rise to even cosmetic damage. Vibration effects on structures are assessed in ES Chapter 12 Noise and Vibration, which concluded that structural effects are unlikely during operational of the airport and were therefore scoped out of the assessment (APP-034, 12.2.5). Construction effects are also assessed in ES Chapter 12 Noise and Vibration, which concludes that cosmetic damage to structures would not arise (APP-034, 12.7.30).
HE.1.19	The Applicant	**Non-designated assets within the airport** Paragraph 9.97, Volume 1, Chapter 9 of the ES [APP-033] states that in the worst case scenario high significance receptors would be subject to a high magnitude of adverse change, resulting in a significant adverse effect that cannot be mitigated to non-significant.

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		With reference to paragraph 5.192 of the 2018 Airports NPS, what weight do you consider the ExA should give to the scale of any potential loss of significance to such non-designated assets?
		Applicant's Response: The Applicant invites the Examining Authority to give limited weight to the potential loss of significance to the non-designated assets. As noted in the ES and the response to HE.1.20 below, the evidence available suggests that the significance of any structures that would be lost is limited.
HE.1.20	The Applicant	**Non-designated assets within the airport** Historic England [RR-0676] is of the view that the scheme will cause considerable harm to the heritage significance of unlisted historic buildings within the airfield as a result of their demolition or changes to their setting, and consider that further investigation and assessment is required to ascertain their importance and condition, and subsequently whether it is desirable and feasible to preserve them and their settings. **What is your view on this and what significance do you consider such assets contain**?
		Applicant's Response: No historic building of significance equivalent to a designated heritage asset will be demolished as part of the Proposed Development, taking into account the Historic England advice in the historic military aviation sites selection guide that 'it is only groups and individual examples of strong intrinsic or associational importance' that would merit designation. Further to the ES assessment, the Stone Hill Park assessment of these structures notes that they are of medium value, and the report produced for KCC, while stopping short of offering a detailed statement of significance, notes only that the WWII Battle Headquarters would be appropriate for a 'special recording effort'. Manston is also not on the list of sites identified as a 'Key

<table>
<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
<tr><td></td><td></td><td>Aviation Site' at Appendix 9 of the Historic England Historic Military Aviation Sites Conservation Guidance (2003), and was not subject to detailed survey as part of this thematic study due to the poor preservation of historic structures.

Where these heritage assets are retained, they would be retained within the context of an active airfield, and in the case of the WWII control tower and other buildings occupied by the museums, within a dedicated 'museums area'. The former RAF Battle Headquarters, the Royal Observer Corps monitoring post and the runway would also be retained. As set out at Section 9.9.8 of the ES (APP-033), in that any contribution of setting that may have been provided by the visual and functional relationship of these structures has been lost through repeated remodelling of the airfield to reflect changing use, it is the association of these structures with an active aviation use that contributes most significantly.</td></tr>
<tr><td>HE.1.21</td><td>The Applicant</td><td>Non-designated assets within the airport

KCC [RR-0975] recognises the limitations that access to the site has caused in terms of surveying heritage assets, but consider that it is not clear which structures may be demolished, what will be unavoidably affected by the Proposed Development, and what may be retained. Reference is made to a table in Appendix 9.1 [APP-051 and APP-052] listing the features in the airfield and to the construction description which does not detail what may be demolished.

Can the Applicant provide more clarity?

Applicant's Response:

A description of what is happening to the existing structures is added to the table in the application as follows.

<table>
<tr><th>Reference UID</th><th>Name</th><th>Site phase</th><th>Description</th><th>Assessment of group significance</th><th>Construction Works</th></tr>
<tr><td>TR 36 NW 881</td><td>T2 Hangar</td><td>WWII</td><td>Manston's remaining T2 hangar was built after</td><td>Despite rebuilding during the 1980's,</td><td>May be retained in early phases of project but will ultimately be</td></tr>
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					1940, but underwent a rebuild during the 1980s that included a new floor, walls, roof cladding and re-wiring & electrics. Only the steel frame remains of the original WWII construction. T2 hangars are relatively common survivals on airfields and numerous better-preserved examples are still extant on other sites.	the original steel frame remains and could be considered to be of significance for historic interest, particularly when grouped with other WWII structures.	demolished to make way for access road, aircraft stands and storage areas. Referred to as Building 3 on phasing drawings.
			TR 36 NW 882	Civil Control Tower	Recent	Following the departure of the RAF in 1999 a new control tower was constructed to the requirements of the CAA for civilian use. It was built over an existing pyrotechnic store which it is believed to have been built after the USAF left Manston in 1958.	Relates to recent use of the airport and of little historic significance.	Building to be demolished. Airport pavements require relatively shallow slopes (eg 1% for aprons) yet the existing site has a general 2-3% fall towards the North. This is one of the areas in which these gradient differences will be overcome using earthwork embankments.
			TR 36 NW 883	Crash Fire Station	USAF	Manston Airport emergency crash fire station was built by the USAF in 1957 and was in	Relates to the USAF use of the site and has thematic, but not functional or	Building to be demolished. Initial reviews suggest the existing fire station lacks the

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					use until the airport's closure in 2014. Much of the building is original construction although a viewing tower was subsequently added and the garage frontage was extended by 2.0m in 2000 to accommodate larger pump engines. Survival of any historic fittings appears minimal and structure is in poor condition.	visual links with TR36 NW894.	capacity and facilities to suit the proposed development. It also appears the structure has been neglected by the current owners. The existing structure will be demolished and replaced with a modern fire station with facilities to serve the cargo airport. ie: locker facilities, gym, offices for a staff of approx. 60 working in 15 person shifts. Up to 5 useable tender bays and parking for additional car sized units. It's also proposed that the new facility will be 'drive in drive out' with vehicle access to the rear. Ultimately this will be revisited in the detailed design and the existing structure will be retained if feasible.
			TR 36 NW 884	Mechanical Transport Hangar	Recent	The current mechanical transport hangar was built c.1960 by Invicta Airlines to house and maintain Douglas DC4 aircraft.	Relates to recent use of the airport and is of little historic significance.	Scope for building to be retained initially but ultimately demolished to make way for new maintenance / recycling hangars and aircraft pavements.

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							Initial review suggests the hangar would be suitable for use on completion of the DCO and potentially useful for aircraft maintenance activities as part of the phased development of the scheme.
		TR 36 NW 885	Aircraft Dispersal Bay	WWII	Built c.1940 this site is the only World War Two concrete dispersal bay surviving at Manston, representing a very limited survival of a much larger scheme built to standardised designs. It was used for the parking and protection of aircraft from enemy fighters and bombers and is surrounded by a protective earthwork bank on its northern side. A modern corrugated metal storage bunker currently sits on the bay.	Represents fragmentary survival of the WWII use of the site and is of limited significance for historic interest.	Removed in the initial phase of the project to allow construction of new ATC tower and surrounds.
		TR 36 NW 886	RAF Manston	WWII-recent	The former RAF Manston control tower built c.1941 was used until it was	Of significance for historic interest due to connection with	Retained in masterplan.

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			Control Tower		succeeded by the civilian control tower (TR 36 NW 882) in 1999. The building is believed to be a 12096/41 Night-fighter station watch office design with a portion built up to the level of the upstand beam with a new level added above at a later unknown date. The control tower has undergone many structural and cosmetic changes during its history with, most recently, the addition of cladding to the exterior.	WWII use of the airfield and is a structural type which is emblematic of the military use of the airfield. diminished by extensive structural and cosmetic changes since WWII.	No works are proposed in this area as part of the DCO. The structure lies within the 'Museum Area' which has been reserved in the masterplan to ensure continued operation of the RAF Manston Spitfire & hurricane memorial museum, the RAF Manston History Museum and a memorial garden.
			TR 36 NW 887	Office Building	Recent	A post 1980 brick-built office building adjacent to the RAF control tower (TR 36 NW 886) used for airfield engineering.	Relates to recent use of the airport and is of little historic significance.	Retained in masterplan. No works are proposed in this area as part of the DCO. The structure lies within the 'Museum Area' which has been reserved in the masterplan to ensure continued operation of the RAF Manston Spitfire & hurricane memorial museum,

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							the RAF Manston History Museum and a memorial garden.
		TR 36 NW 888	RAF Battle HQ	WWII	During the Second World War in common with most airfields RAF Manston had an armoured structure which was used to co-ordinate the defence of the airfield in case of land or air attack. These were built to standardised designs incorporating a square observation post with 360 degree viewing apertures and a 'bomb proof' cap. Underneath are a series of brick-built plotting and communication rooms. This is a well-preserved example of its type but has been dissociated from any related defensive features which have been lost during successive alterations of the airfield .	Relates to WWII use of the site and is of historic significance, although related defensive structures are not extant.	To be demolished. Area is within the boundary of the Northern Grass area in which detailed design of the development has not been undertaken. As such there may be scope to retain the structure within the future development of this area.

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		TR 36 NW 889	Civil Terminal	Recent	From about 1962 a part of RAF Manston was given over to civilian use as Manston Airport. The remainder of the airfield remained in the hands of the USAF. The original terminal building was constructed in 1962 and was replaced by a new terminal in 1989.	The original USAF building was replaced by the current structure, which relates to recent use of the airport and is of little historic significance.	Removed in Phases 1 or 2 to make way for a new terminal structure.
		TR 36 NW 894	Royal Observer Corps Listening Post	USAF	A small concrete underground chamber built c1962 from where it was intended to monitor radioactive fallout in the event of nuclear attack. It formed part of the UK Warning and Monitoring Organisation, a national network of nuclear monitoring posts built between 1956 and 1964. It closed in 1991.	Relates to the Cold War use of the site and is of significance for historic interest and has thematic, but not visual or functional, links with TR36 NW883.	Requires further investigation to determine extent of below ground infrastructure but works within vicinity are limited to fencing, perimeter tracks and service installations which have greater scope to be amended to avoid historically significant infrastructure.
		TR 36 NW 892	Runway	WWII-Recent	RAF Manston's 3,000 yard tarmac 3-parallel runways were built in 1943 as one of a group of three with	Initially constructed for WWII activity, it is of significance for historic interest, as	Overlaid and rehabilitated in line with industry standards.

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			Carnaby (E. Yorks) and Woodbridge (Suffolk) specifically designed to accept aircraft making emergency landings. Prior to the runways' construction, aircraft took off and landed on a series of grassed runways to the north of the current runway. During the 1950s the tarmac was replaced with a concrete runway. It is the tenth longest civilian runway in the United Kingdom. This distinctive runway layout defines the historic layout of the airfield. Neither of the other two runways survives in regular aviation use.	preserving the line and form of the earlier runway.	Retention of the runway is of significance to the project.
HE.1.22	Historic England TDC	**Non-designated assets within the airport** Paragraph 5.192 of the NPS states that the Secretary of State will consider the impacts on non-designated heritage assets on the basis of clear evidence that the assets have a significance that merits consideration in that decision.			

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		What clear evidence is there that the non-designated heritage assets within the airfield have a significance that merits consideration in the decision?
		Applicant's Response: N/A
HE.1.23	The Applicant	**Archaeological features** The ExA notes that the worst case scenario has been assumed (Paragraph 9.1.6, Volume 1, Chapter 9 of the ES [APP-033]) for archaeology within the northern grass area, and that consequently it is assumed that highly significant archaeological remains are present in this area which may be harmed by intrusive groundworks. **Are you of the view that requirements would be sufficient to mitigate this risk given the possible existence of a ring ditch?**
		Applicant's Response: Requirement 16 in the dDCO [APP-006] allows for detailed archaeological investigation of the Northern Grass to identify if there are indeed any archaeological remains, their extent and nature, including the possibility of a ring ditch. A large proportion of the Northern Grass would be taken up by the museums and radar safeguarding zones, in which no construction activity is planned. The flexibility inherent in the proposals for development of the remainder of the Northern Grass would allow for the avoidance of substantial harm through the implementation of design and engineering measures that will be further defined following the pre-construction site investigations required under the relevant requirements in the dDCO.
HE.1.24	The Applicant	**KCC [RR-0975]**

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		Paragraph 9.3.8 of the Environmental Statement (ES) [APP-033] states that the evaluation results have been used to inform the ES. However, it is difficult to see where this is included within the overall baseline provided although short reference is made in Table 9.8 [APP-033]. Given the detailed information now available to the Applicant, KCC states that it would expect greater use of the outputs to inform the discussion of the baseline. **Update or clarify where the report on the Stone Hill Park archaeological evaluation referred to has informed the ES.**
		Applicant's Response: For the purposes of the ES (APP-033), the results of the Stone Hill Park evaluation were used to validate the overall characterisation of the archaeological baseline developed through study of the KCC Historic Environment Record and previous archaeological interventions within the site. This allowed for an informed understanding of the significance of archaeological features anticipated to be present across the site sufficient to inform the likely effects of the scheme. The Stone Hill Park evaluation has been used to inform the mitigation scheme which is being developed in consultation with KCC. It is acknowledged that a detailed programme of archaeological investigation will take place prior to commencement of construction and the findings of this investigation will be used to confirm any inferences drawn from the SHP assessment.
HE.1.25	The Applicant	**Kent County Council (KCC) [RR-0975], Historic England [RR-0676]** KCC believes there is a need to survey and evaluate the Northern Grass Area prior to development. In the Northern Grass Area and areas of the airport which have yet to be evaluated, there remains the potential presence of archaeology of a significance that could require preservation in situ as the desirable outcome. KCC would accept that this can be achieved post determination, as long as there is sufficient - and perhaps substantial - flexibility in the development design to enable preservation to be achieved.

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		Historic England state that the archaeological potential of the Northern Grassland area is not well enough understood at present to effectively avoid harm by design. HE welcome the intention to adopt a "worst-case scenario" approach to assessment of archaeological potential and to undertake investigation to inform the design when access becomes available. Flexibility to redesign the scheme should be allowed so that if archaeological remains of equivalent significance to scheduled monuments are discovered they can be preserved but it is not clear to HE that this has been adequately provided for. A DCO requirement should be included to cover the need to preserve the archaeology including through adjustment of development parameters as well as covering the necessary stages of evaluation and investigation. The requirement should also cover extensive investigation of those areas of the airport where archaeology will be affected by development but is not to be preserved in situ. **Provide your view and clarity on this matter.**
		Applicant's Response: The Applicant accepts that further intrusive archaeological investigation would be required in order to ascertain the presence or absence, nature and significance of any archaeological remains within the Northern Grass, and proposals are being advanced for this further investigation in consultation with KCC. It is made clear in Section 3.3 of the ES (APP-033) that proposals for the Northern Grass set maximum parameters in line with the Rochdale envelope approach, and any design change would be made within these parameters, which set out the maximum extent rather than an established quantum of development. The Applicant acknowledges that in the event that significant archaeological remains are discovered on the Northern Grass, the masterplan would need to remain flexible in order that appropriate protection measures can be adopted. It is reported in the ES at Section 9.8.11 – 9.8.16 (APP-033) that further archaeological works would be required across the whole development area, and proposals are being advanced for this further investigation in consultation with KCC.
HE.1.26	The Applicant	**KCC [RR-0975]**

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		Section 9.8 of the ES [APP-033] discusses the significance of the archaeological baseline and has drawn on the results of the Stone Hill Park evaluation. KCC has agreed that whilst there are substantial areas of the Stone Hill Park findings that can be mitigated through investigation and recording, there are also areas identified for preservation in situ including a: WWII anti-aircraft battery; and Remains of a Roman enclosure possibly associated with the Caesar invasions and the barrow cemeteries on Telegraph Hill, which are likely to be more extensive than the two evaluated. KCC state that most of the features would potentially be preserved in the proposed masterplan [APP-079] although their significance needs to be highlighted so that they are considered as plans evolve. **What is the Applicant's view?**
		Applicant's Response: The remains of the heavy anti-aircraft gun battery, the potential barrow cemeteries and possible Roman military features on Telegraph Hill are located within an area of the Proposed Development that would be largely retained in its existing condition. Any intrusion in these areas would be limited to works associated with the refurbishment of the existing approach indicator lights, which would be located to the south of the presently observed foci of these features. Even where effects could not be entirely avoided, any potential disturbance would be limited in area and depth, comprising a negligible effect which could be easily mitigated.
HE.1.27	The Applicant	**Historic England (HE) [RR-0676]:**

Ref No.	Respondent	Question
		Chapter 9 of the ES [APP-033] does not provide sufficient detail about design flexibility to give HE confidence that major harm to important heritage assets will be avoided. For example it does not adequately describe the likely extent and depth of ground disturbance, the worst possible effects on heritage significance or the provision for flexibility in the quantum of development, design and construction methods. **What is the Applicant's view?**
		Applicant's Response: It is made clear in Section 3.3 of the ES (APP-033) that proposals for the Northern Grass set maximum parameters in line with the Rochdale envelope approach. Further details of potential design responses have not been advanced at this stage because any design changes in the Northern Grass would be required to respond to a number of factors, including the results of archaeological surveys which have not yet taken place. The Applicant acknowledges that in the event that significant archaeological remains are discovered on the Northern Grass, the masterplan would need to remain flexible in order that appropriate protection measures can be adopted. In this regard, there are a number of established design and engineering methods that would be used to avoid archaeological features, including movement of intrusive elements of design and use of alternative foundation designs that would be used to avoid or minimise adverse effects and which would be deliverable within the parameters set out in at Section 3.3 of the ES. The need for and nature of such measures would be confirmed following a pre-construction archaeological investigation to be agreed with KCC and Historic England.
LV.1 Landscape and Visual		
LV.1.1	The Applicant	**Landscape - Contribution and enhancement**

Ref No.	Respondent	Question
		Table 11.11 sets mitigation measures that have been incorporated into the Proposed Development in order to avoid, reduce or compensate for potential adverse landscape and visual effects. However, Table 11.1 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] quotes the draft 2018 NPPF as stating that: The planning system should contribute to and enhance the natural and local environment, protecting and enhancing valued landscapes (Paragraph 168). The ExA notes that the final 2018 NPPF states at paragraph 170 that: *"Planning policies and decisions should contribute to and enhance the natural and local environment by ... protecting and enhancing valued landscapes ... recognising the intrinsic character and beauty of the countryside."* **Demonstrate how the proposal, taken as a whole enhances both the natural and local environment and valued landscapes and recognises the intrinsic character and beauty of the countryside.**
		Applicant's Response: The LVIA process established that there are no local or national landscape designations within the study area. However, published landscape character assessments define character areas across the study area, and recognise the intrinsic character of the countryside; each landscape character area has its own key characteristics and sensitivities that were reviewed and documented as part of the baseline. A number of mitigation measures have been employed to reduce potential effects on landscape character. These include locating the built form back from the edge of the chalk plateau with the southern edge of the plateau cited as a key sensitivity as the skyline and backdrop to the lower lying landscape to the south. Elsewhere the scheme introduces planting to soften the role of the built form.

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		In terms of the proposal enhancing both the natural and local environment, the published landscape character assessment explains that the airport "*comprises a barren landscape of derelict terminal buildings and unmanaged grassland*". The proposed scheme would introduce a sense of coherence and framework of new land uses within the current derelict landscape. The Proposed Development provides a number of opportunities for enhancement of an already degraded landscape. Furthermore, a modern facility would be much better than a derelict airfield and will result in an enhancement of the natural and local environment, and design principles that facilitate this will be included in the Design Guide submitted at Deadline 4, some of which are outlined below: The proposals are set within a generous landscape setting, enhancing the limited existing green infrastructure that depicts the established site boundaries and neighbouring field patterns whilst providing new native long-term structure planting throughout the development. The existing vegetation cover is currently sparse, with much of the boundary planting being degraded, or in decline, through poor management and lack of replacement planting and as such opportunities to enhance the landscape setting exist in parts of the site that are not limited by aviation safety requirements. The main opportunities to enhance the existing setting in the context of the natural environment offer sensitive landscaping exist on the site boundaries and within the Northern Grass area. The site lends itself to enhancement through new buffer planting, between neighbouring residential properties and the surrounding highway network, which will provide a degree of visual containment of the proposals and important green corridors through and around the site, linking it to the wider countryside. Boundary planting is proposed to be elevated on bunding to offer more immediate containment of the site and provide some visual interest across what is predominantly a flat site, The proposals also seek wherever possible to recognise the intrinsic beauty of the countryside through the use of techniques that make reference to (for example) ancient hedgerow planting methods. Screen planting and bunding is proposed, to contain features such as the car park from views across the open fields to properties in the east,. Significant structural planting within the business park provides screening from large scale industrial buildings for low lying properties in the north.

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		New planting is proposed to reinforce the site's infrastructure and enhance legibility throughout the site, as well as to provide screening of the built form which does not exist in the site's current situation. Street planting in the north is of a scale to reflect the building mass and large swathes of screen planting in the north east corners provide a generous buffer between adjacent properties.
LV.1.2	The Applicant	**Landscape** – **Masterplan** Table 11.11 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] references a landscape masterplan. **Either** **i. Show where this is to be found in the submitted documentation; or** **ii. Provide a copy.**
		Applicant's Response: Please see drawings at Appendix LV.1.2 in TR020002/D3/FWQ/Appendices. Landscaping masterplan drawings have been prepared in accordance with the Masterplan [APP-079]. These are considered to be live documents which will be developed as part of the ongoing detailed design. The enclosed drawings are by necessity at an indicative stage until the detailed design of the site is undertaken. The landscaping design will be developed by the landscape architect working as part of a multi-disciplinary team in conjunction with the detailed design progression of the site and will be approved under requirement 10 of the DCO.

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LV.1.3	TDC	**Landscape and Visual Impact - Thanet Local Plan** Table 11.1 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] quotes relevant policies from the Thanet Local Plan(2006) Saved policies. **State the effects that the new deposited local plan policies would have in this respect.**
		Applicant's Response: N/A
LV.1.4	The Applicant	**Landscape** – **Trees and hedgerows** The Environmental Statement (Environmental Statement Volume 2: Main Text – Chapter 11 – 11.4.8) [APP-034] states that 'vegetation within the site is minimal', but includes: An Avenue of tree planting along sections of B2190 Spitfire Way (inside the site boundary and immediately outside but adjacent to the boundary on the grass verge outside the perimeter fence); A Short avenue of trees in the south-east corner of the site, within the site boundary and does not appear to mention hedgerows within the site. Article 34 of the dDCO [APP-006] deals with Felling or lopping of trees and removal of hedgerows. The ExA were informed at the ISH on the dDCO held on 10 January 2019 that there would not be any felling or lopping of trees or removal of hedgerows.

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		However, the ExA notes that the Register of Environmental Actions and Commitments [APP-010] references "new tree planting to be undertaken to replace that lost." **Confirm this and, if so, show where this commitment is secured in the dDCO or in any of the documents secured through Schedule 10.**
		Applicant's Response: During the assessment stage it was understood that no felling or lopping of trees or removal of hedgerows would be required however it is now understood that this statement only referred to the airfield itself. Since the assessment was completed it has been possible to gain access to the site under the powers granted by Section 53 and as such further observations have been possible alongside the surveys being carried out for certain specific faunal species. The Applicant therefore takes the opportunity to note that Wood's ecologists, the Applicant's environmental consultants, have confirmed that some of the above referenced trees do in fact appear to conflict with the current masterplan and may need to be removed. These trees are close to the boundary, on the Northern Grass. They are relatively young and not considered likely to perform a critical ecological function although this will be confirmed as the surveys progress. It is also understood that there are some trees or shrubs located around the existing fuel farm, which may also need to be maintained or felled completely depending on the final design of that facility. As such, the Applicant feels that it would be appropriate to maintain the commitment relating to new tree planting in the event of any loss. The planting proposed elsewhere within the application site (along the eastern and western boundaries of the northern grass area and south of Spitfire Way) should more than compensate for vegetation that is lost.
LV.1.5	The Applicant	**Landscape - Planting scheme**

Ref No.	Respondent	Question
		Para 11.1.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that: *"Some fixed areas of planting are proposed [...] Elsewhere in the 'Northern Grass' area, planting will be introduced as part of the final layout of this area. However, this planting has not been defined within the broad zones to allow for future flexibility in the design."* Given this: **i. Comment on whether, if any planning scheme is to be relied on for screening, there should be a requirement that this is provided in advance of the date of opening.** **ii. Show how any planning, if not yet defined, has been taken into account in any assessment of the visual impact of the proposed development.**
		Applicant's Response: i. The revised dDCO submitted for Deadline 3 [TR020002/D3/2.1] now includes a requirement for the submission and approval of a landscaping scheme prior to the commencement of the relevant part of the authorised development. That landscaping scheme will require planting to be provided along the western and eastern perimeters of the business park and east of Spitfire Way/south of Manston Road. This planting has been relied upon as mitigation in the LVIA by filtering views of the large-scale built form within the airport or in the case of the business park, to prevent the built form from becoming overbearing. The assessment has been carried out on the assumption that the western and eastern perimeter planting around the business park would be undertaken in Year 1 and planting east of Spitfire Way/south of Manston Road would be implemented by Year 10. ii. Any additional planting within the Northern Grass Area (i.e. not that along the eastern and western boundaries) which has not yet been defined has not been taken into account in the visual assessment. The exception to this is in relation to the assessment for Viewpoint 7 (Appendix 11.3 of the Environmental Statement [APP-057]) which states for the Year 20 assessment that "*Although not shown on the masterplan so as to allow for flexibility in the layout of the northern business*

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		development, planting is highly likely to be introduced along the northern boundary of the site and this may begin to soften the lower facades of the units and break up their visual mass". Whilst this statement is made in the rationale, the planting has not influenced the predicted magnitude of visual change on the basis that it is not fixed.
LV.1.6	The Applicant	**Landscape - Planting scheme** Para 11.1.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that: *"Some fixed areas of planting are proposed, ... Elsewhere in the 'Northern Grass' area, planting will be introduced as part of the final layout of this area. However, this planting has not been defined within the broad zones to allow for future flexibility in the design."* Given this: **i. Comment on whether, if any planning scheme is to be relied on for screening, there should be a requirement that this is provided in advance of the date of opening.** **ii. Show how any planning, if not yet defined, has been taken into account in any assessment of the visual impact of the Proposed Development.**
		Applicant's Response: This is the same question as LV.1.5. The Applicant's response is therefore the same as that provided for question LV.1.5.
LV.1.7	The Applicant	**Landscape - Assessment of Landscape Effects**

<table>
<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
<tr><td></td><td></td><td>
Section 11.8 Assessment of Landscape Effects in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] shows a significant effect for a number of receptors summarised in Table 11.133.

The Register of Environmental Actions and Commitments [APP-010] sets out some mitigation in the form of, for example, landscaping and local bunding.

Provide a table showing how these mitigation actions will serve to reduce the significant effects for specific receptors listed in table 11.133.

Applicant's Response:
<table>
<tr><th>Incorporated Measure (from the Register of Environmental Actions and Commitments)</th><th>Receptor</th><th>Commentary</th></tr>
<tr><td>Planting within the 45m wide buffer zones along the western perimeter of the business park (Northern Grass Area)</td><td>Residential Receptor Group 25: Preston Road properties, Preston Farm and Coldswood Farm</td><td>The planting proposed along the eastern perimeter of the business park will soften and filter/screen views of the business park units by Year 20 thereby reducing the magnitude of visual change with a corresponding change from a significant to not significant visual effect.</td></tr>
<tr><td rowspan="2">Planting within the 45m wide buffer zones along the eastern perimeter of the business park (Northern Grass Area)</td><td>Residential Receptor Group 38: Terraced and semi-detached properties on the eastern side of Manston Court Road</td><td>Whilst the proposed planting itself would foreshorten existing open views from this group of properties (and would contribute to the predicted high magnitude of visual change), the introduction of the planted buffer zone would ensure that the built form introduced within the business park would not become overbearing.</td></tr>
<tr><td>Residential Receptor Group 39: Properties</td><td>Whilst the proposed planting itself would foreshorten existing open views from the two northern most properties</td></tr>
</table>
</td></tr>
</table>

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			around Manston Court on eastern side of Manston Court Road	in this group (and would contribute to the predicted high magnitude of visual change), the introduction of the planted buffer zone would ensure that the built form introduced within the business park would not become overbearing.
			Residential Receptor Group 40: Northern semi-detached properties on western side of Manston Court Road	The proposed planting would in itself foreshorten the existing open views available to residents from the rear upper storey windows of these properties hence the predicted significant visual effects. The introduction of the planted buffer zone would ensure that the built form introduced within the business park would not become overbearing.
			Residential Receptor Group 41: Southern terraced properties on western side of Manston Court Road	The proposed planting would in itself foreshorten the existing partial open views available to residents at these properties hence the predicted significant visual effects. The introduction of the planted buffer zone would ensure that the built form introduced within the business park would not become overbearing.
		Planting within the 45m wide buffer zones along the western perimeter of the business park (Northern Grass Area)	Residential Receptor Group 47: Properties west of Manston Road	The proposed planting would in itself foreshorten the existing open views available to residents from the rear windows and gardens of these properties hence the predicted significant visual effects. The introduction of the planted buffer zone would ensure that the built form introduced within the business park would not become overbearing.
		Planting along Spitfire Way	Residential Receptor Group 36: Properties on Bell Davies Drive	The tree and shrub planting along the southern side of Spitfire Way would soften and filter views of the large-scale structures within the western part of the Site by Year 20 thereby reducing the magnitude of visual change with a corresponding change from a significant to not significant visual effect.

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				Note: there is an error in Table 11.133 and significant visual effects are predicted for Year 1 and Year 10, not just Year 1 as stated in Table 11.133.
LV.1.8	The Applicant	**Design** – **Principles** The 2018 Airports NPS, which is an important and relevant consideration in the examination of this application, states in paragraph 4.30 that: *"Visual appearance should be an important factor in considering the scheme design, as well as functionality, fitness for purpose, sustainability and cost. Applying 'good design' to airports projects should therefore produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction, and matched by an appearance that demonstrates good aesthetics as far as possible."* **Describe how the design approach set out in the Design and Access statement (Part 4) [APP-084] fulfils the four characteristics of:** • **Being sensitive to place;** • **efficient in the use of natural resources;** • **efficient in energy used in their construction; and** • **an appearance that demonstrates good aesthetics as far as possible.**		
		Applicant's Response: A Design Guide that expands on the design principles described in the Design and Access Statement [APP-081-084] will be submitted at Deadline 4. In the meantime, the Design and Access Statement addresses these characteristics as follows.		

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		Being sensitive to place; • Landscaped boundaries to sensitive areas of the site i.e. 45m clearance zone to the first building from the site boundary in sensitive areas of the Northern Grass area. • Protecting the historic aviation usage of the site by safeguarding the existing memorial gardens and museums.. • Referencing and enhancing the aviation usage of Manston Airport through any new proposals. • Tasteful and subtle use of colour on proposed buildings within the site. • Maximum height restrictions to sensitive areas through zone specific parameters on the site in order to reduce the visual impact of the proposal within the area. • Use of new landscaping to filter views into the development. *Efficient in the use of natural resources;* • Recycled aggregates. • Travel plan to promote sustainable access where applicable. • Maximum Car Parking Capacity. • Promotion of public transport accessibility. *Efficient in energy used in their construction; and* • CEMP (Construction Environmental Management Plan) will be put in place which will set out how construction workers travel to site, including the use of sustainable transport modes. • Earthworks construction waste could be minimised by balancing the cut and fill operations for the new aircraft cargo stands and warehousing. *An appearance that demonstrates good aesthetics as far as possible.* • The establishment of a Design Guide for the site which will ensure the consistent application of good aesthetic and design throughout the development. • The use of high quality materials.

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		• Promoting design which references the historic aviation context and use of the airport. • Colours used within the proposed development will remain neutral and unobtrusive (e.g. whites greys and anthracite) in order to reduce the visual impact of the proposed development. • The Applicant will prepare a Design Guide which will set out in further detail, with reference to the 2018 Airport NPS, where the development will fulfil the characteristics of: o Being sensitive to place and the site's historic context; o Designing sustainably and being efficient in the use of natural resources; o Building sustainably during construction; and o The proposed aesthetic quality, including character and place making, of the future development.
LV.1.9	The Applicant	**Design** – **Principles** The 2018 Airports NPS, which is an important and relevant consideration in the examination of this application, states at paragraph 4.34 that: *"There may be opportunities for the applicant to demonstrate good design in terms of siting and design measures relative to existing landscape and historical character and function, landscape permeability, landform, and vegetation."* The Relevant Representation from Historic England [RR-0676] states that: *"We think that the open grassland character evokes the wartime airfield use, constitutes an historic area in its own right and contributes to the heritage significance of the wartime buildings, the museums and the memorial garden. The proposed development would be very harmful to historic character so we think that the potential to reduce harm by amending the design should be explored."* **Describe how the design approach to the development of open grassland, including in the Northern Grass, has sought to reflect the historic character of the site.**

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		Applicant's Response: The design approach reflects the historic aviation usage of the site by continuing the aviation functionality of the site and safeguarding historical assets such as the museum and memorial garden to protect or enhance them. The memorial garden and museums are safeguarded within a 3ha area in the proposed masterplan [APP-079]. The design maintains areas of grassland within the Northern Grass area. A 45m buffer zone between site boundary and new buildings has been allowed for in the masterplan. This significantly reduces the developable area available but has been committed to in part to ensure the development is sympathetic to the local area. The historic usage of the site will be reflected in the proposal for airport related facilities on the Northern Grass area. The Design Guide to be supplied at Deadline 4 will set out, with reference to Historic England's Historic Military Aviation Sites Conservation Guidance (2016), the ways in which the development seeks to preserve the historic character of the site while securing its continued use as an airfield through durable and functional regeneration. This will make specific reference to the retention of historic existing site features and building -e.g. Royal Observer Corps Listening Post, RAF Battle HQ and Runway. The Applicant is retaining the following (unlisted) existing structures of historic significance: **TR 36 NW 894** Royal Observer Corps Listening Post **TR 36 NW 888** RAF Battle HQ **TR 36 NW 892** Runway
LV.1.10	The Applicant	**Design - Principles** Para 11.1.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that:

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		"The 'Northern Grass' area has been presented through a zonal approach whereby broad zones of building heights have been established without fixed building footprints being defined." **Given this approach, how has the visual impact of this part of the proposed scheme been assessed?**
		Applicant's Response: The visual assessment has been conducted based upon the maximum building heights within the parameters for each zone.
LV.1.11	The Applicant	**Design - Principles** Table 11.4 states that: *"The design principles set out in the Design and Access Statement will be used to ensure that all elements of the Proposed Development, including materials and colour are designed to a high standard as detailed design progresses."* The ExA assumes that the design principles are those contained in section 7.0 of the Design and Access Statement (Part 4) [APP-084]. **Show where the design principles ensure that colour is designed to a high standard and where this is reflected in, for example, the Visualisations in Part 8.0 of the Design and Access Statement (Part 4) [APP-084].**
		Applicant's Response: The Applicant is committed to the principals as described in the Design and Access Statement [APP-081-084]. The Applicant has committed to producing a Design Guide as part of the detailed design of the Proposed Development which will follow the above principles. This will be submitted at Deadline 4.

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		Requirement 4 of the dDCO, submitted for Deadline 3 [TR020002/D3/2.1], has been amended to require design to be in accordance with the Design Guide.
LV.1.12	The Applicant	**Design – Principles** **With reference to para 7.15.1 of the Design and Access Statement [APP-084] set out what is meant by a "*consistent contemporary and light industrial aesthetic*."**
		Applicant's Response: By consistent it is meant that a comprehensive high level design guide (as initially established in the Design and Access statement) will be applied to buildings in the proposal to ensure that all buildings within the site relate to and complement each other. This is proposed to be achieved through methods such as agreed material palettes, zone specific height parameters in sensitive areas and a development wide design guide to promote future consistency. By contemporary it is meant that building will reflect modern design techniques and high quality modern design. Attention will still be paid to the historic context of the site through contemporary interpretation rather than replication. An example of this could be the proposed curved roof proposal of the cargo facility and terminal building which evokes the curved aerofoil profile of a plane's wing through high quality modern materials and construction techniques. By light industrial it is meant that the buildings will be produced using contemporary materials which are high quality but still functional and cost effective. By light specifically it is meant that materials and forms will not be bulky or obtrusive in form and design will be as far as practicable elegant and attractive. Attention will also be paid to natural lighting within buildings including roof lights or polycarbonate panels.

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		By industrial aesthetic it is meant that the design guide of the proposal will promote building forms, material treatments and details which promote and evoke an aesthetic and form which follows the proposal's function as a modern cargo airport – i.e. the proposals will be related to and inspired by industrial and aviation design.
LV.1.13	The Applicant	**Design – Principles** **With reference to paragraph 4.31 of the 2018 Airports NPS explain how good design has been used to meet the principal objectives of the scheme by eliminating or substantially mitigating the adverse impacts of the development.**
		Applicant's Response: Paragraph 4.31 of the Airports NPS states: *A good design should meet the principal objectives of the scheme by eliminating or substantially mitigating the adverse impacts of the development, for example by improving operational conditions. It should also mitigate any existing adverse impacts wherever possible, for example in relation to safety or the environment. A good design will also be one that sustains the improvements to operational efficiency for as many years as is practicable, taking into account capital cost, economics and environmental impacts.* The design has incorporated these objectives as follows. The concept design of Taxiways and Runway have avoided use of maximum gradients, this provides flexibility for detailed design to accommodate varying site levels. This substantially mitigates the adverse impact of accommodating changes to taxiway vertical profiles during design development. The layout of the masterplan positions stands closer to the runway than the cargo facility; this avoids impact on the Runway Obstacle Limitation Surface. This assists in mitigating adverse impacts on safety. The existing airport site has a steady 2-3% fall north, away from the runway. This creates a challenge for providing compliant gradients for Taxiways (1.5%) and Aprons (1%). The design utilises a Macro earthworks cut/fill balance and by locating the

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		cargo stands in the middle of this area this challenge has been overcome. This substantially mitigates adverse impacts on the environment. Utilising the cut/fill balance also mitigates the generation of surplus material that would need to be transported off site. This will be further refined as the scheme develops, further mitigating adverse impacts on the environment. The existing airport pavement infrastructure has been re-used where possible. For example the existing runway is being overlaid. The passenger apron and taxiway are also retained in the masterplan design. This mitigates the scheme's environmental impact by reducing the requirement to create new infrastructure and reduces generation of waste. The site fuel farm is located on an existing fuel site. This maintains the fuel farms extant use and avoids creating a new fuel farm on the site. The site's location with airside access also increases operational efficiency. The site radar makes use of a previous radar installation location. This maximises use of existing infrastructure, takes advantage of existing operational efficiency and assists in mitigating adverse environmental impacts by reusing existing infrastructure. The attenuation ponds are located at the site's natural low point. This allows for maximum use of gravity feeds to the pond storage and minimises reliance on pumping to remove water from critical infrastructure areas. This improves operational efficiency of the network and provides increased safety from the impacts of failure in the pumping network. The passenger car parking has been centralised to the east of the site with its own site access. This separates passenger and cargo movements. This helps to mitigate safety concerns related to HGV and Passenger movements and also provides operational efficiency in the location of services and controls. • The use of sustainable urban drainage systems (SUDs) to mitigate impact of development on surface water (see the proposed attenuation ponds) helps to mitigate environmental impact of the scheme. • Airfield layout design to minimise times taxiing and holding providing additional operational efficiency.

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		• Habitat creation on-site south of the current southern perimeter fence and within land parcel 1362 - Created habitat will be specifically designed with diverse features to encourage invertebrates, including features typical of open mosaic habitat. This helps to mitigate the adverse environmental impact of the scheme. • Off-site habitat provision in the c.36ha land parcel 1362 for ground nesting farmland birds e.g. skylark and grey partridge. Created habitats, improving the quality of that lost on site, to have particular species-specific measures and managed for farmland birds. This helps to mitigate the adverse environmental impact of the scheme. • The use of, where practicable, sustainable materials in the building construction (i.e. recycled aggregates) This will help to mitigate the adverse environmental impact of the scheme. • The use of, where practicable, renewable energy on site – (i.e solar panels PVs, roof lights, storm water recycling etc.) This will help to mitigate the adverse environmental impact of the scheme. • The use of planting within the development as shown by the landscaping scheme which filters views into the development, provides relief to the built form, reduces surface water runoff, filters noise and absorbs air borne particulates. This helps to mitigate the adverse environmental impact of the scheme. • The application of landscaping boundaries to sensitive visual areas of the development to reduce the visual impact of the development– i.e. 45m buffer to the Northern Grass areas This helps to mitigate the adverse environmental impact of the scheme. • The application of height constraints and zone specific parameters to develop a hierarchy of sensitive areas (i.e. buildings closer to the site boundary have a lower maximum height to reduce visual impact) This helps to mitigate the adverse environmental impact of the scheme. Taken together the elements of design described above substantially mitigate the adverse impacts of development.

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LV.1.14	The Applicant	**Design – Principles** **With reference to 4.33 of the Airports NPS show how the design of the scheme contributes to the quality of the area in which it would be located**
		Applicant's Response: Paragraph 4.33 of the Airports NPS states as follows: *The scheme should take into account, as far as possible, both functionality, including fitness for purpose and sustainability, and aesthetics, including the scheme's contribution to the quality of the area in which it would be located. The Applicant will want to consider the role of technology in delivering new airports projects. Professional, independent advice on the design aspects of a proposal should be undertaken to ensure good design principles are embedded into infrastructure proposals.* These principles have been taken into account as follows. <u>Functionality and Fitness for Purpose:</u> •The proposed masterplan [APP-079] responds to the market need for further aviation cargo facility capacity as well as the need for MRO and aircraft breakdown areas. •The proposed masterplan also includes a phasing strategy which can be implemented and expanded in direct response to the demands of the markets and industry. This will prevent the scheme building more than is required and therefore maintain its fitness for purpose across the lifespan of the airport. <u>Sustainability:</u>

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		•The scheme proposes to build upon the current infrastructure available at the airport and make use of suitable existing assets such as the runway, passenger apron and fuel farm mitigating the impact of constructing new assets. •The proposed masterplan includes an aircraft breakdown area which meets the global need for aircraft recycling and will mitigate the adverse environmental impact or current aircraft retirement procedures. Aesthetics and Quality of the Area • The scheme will include a design guide which will seFtrt out the principles for good aesthetics across the airport and secure consistently good design throughout the whole site. The Design Guide is to be provided at Deadline 4, and contains a dedicated section related to the quality and character of the development and how that will contribute to the surrounding area with reference to Para 4.33 of the Airport NPS. This will include sensitivity to place; the quality and character of the development and how this will be secured through a set of design principles that future development at the airport will be guided by and committed to follow. • The design of scheme will make reference to the historic character and identity of the area- particularly the RAF and wartime heritage of the airport. This will be secured through the use of building forms, through subtle references (use of historical RAF colour insignia across way-finding at the site) and public accessible memorials and public art and sculpture which will pay tribute to the military history of the site and the Manston area as a community. Role of Technology • The execution of the scheme will make use of modern technology such as BIM (Building Information Modelling) during the design stage. This will reduce waste during construction through better coordination of the design team. It will also help in the maintenance of built assets after construction through having greater control, through accurate 3D modelling, in the post-occupancy operations phase. • The design of the scheme contributes to the quality of the area in which it would be located by continuing and enhancing the historic aviation usage of Manston Airport.

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		• The scheme protects and allows for the enhancement of existing related functions of the area including the memorial garden and existing aircraft museums • The scheme will reflect and continue Manston Airport's aviation history through contemporary high quality new facilities and buildings which maintains and progresses Manston's history as an aviation site. The Applicant proposes to produce a Design Guide to be provided at Deadline 4, which will contain a dedicated section related to the quality and character of the development and how that will contribute to the surrounding area with reference to Para 4.33 of the Airport NPS. This will include sensitivity to place, the quality and character of the development and how this will be secured through a set of design principles that future development at the airport will be guided by and committed to follow. Compliance with Design Guide will be secured through requirement 4 of the dDCO.
LV.1.15	The Applicant	**Design - Tranquillity and dark skies** Paragraphs 11.4.39 to 11.4.44 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] reference CPRE Tranquillity and Night Blight Mapping. **Show how the use of these documents has influenced scheme proposals as submitted.**
		Applicant's Response: The Applicant has been aware of CPRE Tranquillity and Night Blight Mapping, but they do not provide information at a scale suitable to inform scheme proposals, which were instead informed by direct field observation. Both data sets are referenced in the LVIA in order to provide contextual information regarding these perceptual aspects of the site in relation to surrounding areas. An understanding of patterns of relative tranquillity and night-time lighting across the LVIA study area contextualised field observations and informed the Landscape Character Area sensitivity assessments provided in Appendix 11.2 and the impact

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		assessments for the LCAs provided in Tables 11.20 through 11.33 of Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 (APP-034). Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 predicted that no significant adverse effects would be sustained by any LCA as a result of the development and the CPRE documents therefore influenced the proposals indirectly by helping to demonstrate that the proposals are acceptable in terms of impact on landscape character.
LV.1.16	The Applicant	**Design - Museums** Table 11.3 states that the two museums are being retained as part of the Proposed Development. The ExA received evidence from Mr Russell at the Open Floor Hearing held on 11 January 2019 that there are proposals to move the museums. **i. Indicate the status of any proposals to move the Museums; and** **ii. state whether these proposals have been incorporated into the design process for the proposed scheme.**
		Applicant's Response: i. Statements of Common Ground have been agreed with both museums which include proposals to re-locate the museums to another location on the Northern Grass within the museum safeguarded area. No move will take place without the consent and approval of the two museums and in the event that it did occur it would be subject to a planning application by the respective museums to the local planning authority. ii. The museum safeguarding area is part of the masterplan (APP-079) and the dDCO includes no powers to carry out any works within that area.

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LV.1.17	The Applicant	**Visual Impact** – **Study area** Figure 11.1 and paragraph 11.6.5 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] shows the Landscape and Visual Impact Assessment (LVIA) study area as being within 5km of the site. **Justify the choice of this boundary.**
		Applicant's Response: A LVIA study area of 5km was initially identified based upon the criteria set out in Paragraph 11.3.2 of the Environmental Statement [APP-034]. The 5km LVIA study area was included in the Scoping Report issued to consultees including Thanet District Council and Kent County Council to give them the opportunity to suggest a more appropriate study area based upon their local knowledge. No change to the LVIA study area was requested by any consultee. The study area was tested through the viewpoint assessment and had any significant visual effects been identified at or close to 5km boundary then at that time the study area would have been reviewed accordingly.
LV.1.18	The Applicant	**Visual Impact** – **Study area** **Justify the boundaries of in the Zone of Theoretical Visibility (ZTV) as set out in ES Volume 4: Figures [APP-041] given the statement made in the ISH on the dDCO held on 10th January 2019 that there is uncertainty as to the existing levels within areas of the Order Limits.**
		Applicant's Response: The ZTVs included in ES Volume 4: Figures [APP-041] illustrate the potential visibility of proposed structures based upon the maximum height parameters for those structures in meters above ordnance datum (m AOD) not in meters above ground

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		level (m AGL). As such, the height of structures modelled in the ZTV is absolute rather than relative to ground levels and any uncertainty regarding ground levels within areas of the Order Limits has no impact upon the ZTV boundaries.
LV.1.19	The Applicant	**Visual Impact** – **Study area** Para 11.3.2 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states the study area has been selected with regard to previous experience of undertaking LVIAs for similar types of development. **Reference the similar types of development to Manston Airport used in the definition of the study area.**
		Applicant's Response: Wood, the Applicant's environmental consultants who prepared the LVIAs, has prepared LVIAs for proposed development at Bristol Airport as well as several LVIAs for developments which include large-scale industrial buildings (e.g. Encirc in Cheshire, distribution warehouses in South London, Northamptonshire and Suffolk).
LV.1.20	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Para 11.3.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that ZTVs for aircraft approaching, moving along and departing from the runway have not been modelled. It justifies this, in part, by stating that it is not considered likely that overflying of aircraft in the sky could give rise to significant visual effects due to the intermittent, transitory and small-scale nature of the changes that would arise in views. This is repeated in paragraphs 11.6.2. and11.6.16. **Given, inter alia, the number of ATMs proposed, justify the implication that the frequent presence of aircraft overhead would not alter the visual perception of any locations within the study area.**

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		Applicant's Response: The Applicant's position is not that overflying aircraft will have no effect on the visual perceptions of any locations within the study area nor that the effect of overflying of aircraft would not be significant. It is anticipated that at Year 10, there would be approximately two incidents of overflying aircraft an hour between the hours of 0700 – 2300 rising to approximately four ATMs an hour in Year 20. The intermittent and transient nature of the presence of overflying aircraft would not equate to visual changes that are of a long duration and so are not considered to be significant.
LV.1.21	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Paragraph 11.6.18 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that visual effects during the construction phase of the Proposed Development could lead to effects on human receptors However, paragraph 11.3.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that ZTVs for the construction phase, including two 40m mobile cranes have not been modelled. One justification for this is that there would be a temporary presence of the cranes. However, Section 11.8 Assessment of Landscape Effects in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] does appear to assess the impact of the construction phase on receptors. **Given that Table 6.2 in the ES Volume 15 [APP-061] shows that there will still be construction activity in 2037 and given the statement in paragraph 11.6.18 and given the description of Year 1 impacts in Section 11.8, justify the statement in paragraph 11.3.9.**
		Applicant's Response:

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		The absence of a ZTV for the mobile cranes does not mean that there has been no assessment of this component of the development. An assessment of visual effects on receptors which lie within the ZTV includes consideration of the temporary deployment of mobile cranes throughout the construction of the development. For receptors located outside of the ZTV, the temporary presence of cranes in their views has been tested through the viewpoint assessment in Appendix 11.3 [APP-057]. Viewpoints 9, 11 and 19 lie outside of the ZTV and the visual assessment for these viewpoints considers the presence of cranes and demonstrates that receptors would not experience significant visual effects as a result of cranes on their own. As a consequence, the absence of a ZTV does not result in the failure to identify any receptors who may experience significant visual effects.
LV.1.22	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Table 11.5 states, in response to a consultation request from Stone Hill Park Ltd that: "*Viewpoint photography has not been included from the PRoWs close to the eastern boundary as this will require a diversion as part of the proposals*." **Justify this statement, given that the diversion will also follow the Eastern Boundary.**
		Applicant's Response: Viewpoint 6 (Figure 11.13) [APP-041] is located approximately 500m to the east of the proposed diverted footpath and is considered to be representative of the view which would be available from the diverted PRoW. An assessment of the visual effects from this diverted PRoW is included in Table 11.105 in the Environmental Statement [APP-034]. The Applicant considers that whilst there is no viewpoint photography from this PRoW, the effects on receptors on the PRoW have been considered in the assessment and are illustrated in the baseline photograph and wireline for Viewpoint 6.

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LV.1.23	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Landscape Institute Advice Note 01/11 on Photography and photomontage in landscape and visual impact assessment recommends that the viewpoint's height above ground level and OS grid coordinates are recorded. The wirelines set out in Appendix 11.1 in Environmental Statement, Volume 12: Appendices 10 .1, Appendix B – 12.14 [APP-057] record height above OD rather than ground level. **Either provide a table showing the heights of the viewpoints in figures 1 to 26 in Appendix 11.1 above ground level or confirm that all viewpoints were taken at ~1.8m above ground level as recorded in ES Volume 4: Figures [APP-041].**
		Applicant's Response: All viewpoint photographs were taken at an elevation of 1.5m above ground level (AGL). The elevation of 1.8m AGL stated in ES Volume 4: Figures [APP-041] is incorrect. The Viewpoint height provided on figures 1 to 26 in Appendix 11.1 refers to camera height at the viewpoint based upon ground level elevation (as derived from a digital terrain model) plus 1.5m and rounded to the nearest 0.5m. The 0.3m difference in level does not affect the assessment.
LV.1.24	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Figure 1 in Appendix 11.1 in Environmental Statement, Volume 12: Appendices 10 .1,Appendix B – 12.14 [APP-057] shows "*Proposed spitfire and huricane* [sic] *memorial museum*". This proposal is not shown in Schedule 1 of the dDCO [APP-006] or shown on the Works Plans [APP-018]. **Explain this discrepancy.**

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		Applicant's Response: This is a labelling error. The line shown in the wirelines is correct but the label referring to the museum is incorrect. This error has been corrected in the revised wirelines provided as Appendix CA.1.4 in TR020002/D3/FWQ/Appendices.
LV.1.25	The Applicant	**Visual Impact – Viewpoints and wirelines** **i. Explain what Figures 6, 8, 13, 15, 19, and 20 in Appendix 11.1 in Environmental Statement, Volume 12: Appendices 10.1,Appendix B – 12.14 [APP-057] actually show.** **ii. Would any of the Proposed Development be visible from these viewpoints?**
		Applicant's Response: i. The figures listed in Question LV.1.25 in Appendix 11.1 of the Environmental Statement show that the built components of the Proposed Development would be screened by intervening landform/vegetation or built form. ii. The built components would not be visible from the viewpoints listed in Question LV.1.25.
LV.1.26	The Applicant	**Visual Impact – Viewpoints and wirelines** Paragraph 11.3.7 9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that: "*...a ZTV for the operational phase has been modelled to demonstrate the potential visibility of aircraft stationary at the stands. This has utilised a maximum height of a tail fin of 19.5m...*"

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		Appendix 11.1 in Environmental Statement, Volume 12: Appendices 10 .1, Appendix B – 12.14 [APP-057] does not show any tail fins as being potentially visible from any of the viewpoints chosen. **Will tail fins be visible?**
		Applicant's Response: Tails fins will be visible from some of the viewpoints. Whilst a ZTV has been prepared to inform that assessment, tail fins are not shown on the wirelines in Appendix 11.1 which illustrate that built components of the development only. Tail fins of aircraft would not be static and would move between aprons and along the taxiways/runways and to capture them at a specific location in a static wireline would be misleading.
LV.1.27	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Figure 7 in Appendix 11.1 in Environmental Statement, Volume 12: Appendices 10 .1, Appendix B – 12.14 [APP-057] appears to show part of the indicative obscured business development zones as being above the level of the horizon. **Explain by what this proposed development is obscured.**
		Applicant's Response: This was an error on Figure 7 and has been corrected on the revised wireline for Viewpoint 4 (Appendix CA.1.4 in TR020002/D3/FWQ/Appendices). The viewpoint assessment contained within Appendix 11.3 of the Environmental Statement (APP-057) states that "*there would be partial views of the roofs of a proportion of the business units……*". This statement remains valid for the revised wireline and the magnitude of change assessed in the assessment for Viewpoint 4 is also unchanged in light of the revised wireline.

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LV.1.28	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Para 11.3.6 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] shows parameters for modelling potential visibility. With the exception of the radar tower, these heights cited do relate to the descriptions of the relevant Works set out in Schedule 1. **Show where in the assessment of potential visibility:** **i. The general vertical upward deviation of 2 metres allowed for in Article 6(c); and** **ii. the maximum height for specified works allowed for in the table in Article 6(c) have formed the basis of modelling for potential visibility.**
		Applicant's Response: i. The assessment is based on maximum parameters which relate to the heights of buildings and features described in Chapter 3 of the ES (APP-033). No upward deviation has been allowed for over and above the parameters assessed in the ES. ii. The Applicant confirms that the maximum heights in Article 6(c) have formed the basis of modelling for potential visibility.
LV.1.29	The Applicant	**Visual Impact** – **Viewpoints and wirelines** Figure 4 and 5 in Appendix 11.1 in Environmental Statement, Volume 12: Appendices 10 .1, Appendix B – 12.14 [APP-057] appears to show the same viewpoint (2) but from different directions. Both figures show the same 'Direction to site'. **Explain.**

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		Applicant's Response: This was an error. Figures 4 and 5 have been revised with Figure 4 now stating *south-south-east* with regard to direction to site and Figure 5 stating *south* (Appendix CA.1.4 in TR020002/D3/FWQ/Appendices).
LV.1.30	The Applicant	**Design** – **Customs, immigration and security** The 2018 Airports NPS, which is an important and relevant consideration in the examination of this application, states in paragraph 4.32 that: "*The Secretary of State will also need to be satisfied that extant security, customs and immigration measures are maintained or reprovided*." The Planning Statement at paragraph 4.15 states that: "*The Masterplan allows for the required security, customs and immigration measures*." **Either:** **i. show where in the application documentation considerations of security and customs and immigration measures are considered in the design of the proposed scheme and where the masterplan and the design principles take these into account; or** **ii. provide an explanation of how security and customs and immigration measures have been considered in the design of the proposed scheme and how the masterplan and the design principles take these into account.**
		Applicant's Response:

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		ii The Applicant has considered security and customs and immigration requirements as a part of the outline plan for example: Passenger Terminal: it is recognised that security issues are a key priority when designing and constructing new airport terminals, especially the need to incorporate terrorist attack mitigation measures. The outline design of the terminal has considered the guidance specified in the Department for Transport document 'Airport Security in Aviation Development (ASIAD)'. An important issue is terminal forecourt design to defeat hostile vehicle attacks. Therefore the terminal position allows for the required 30m clearance zone into which no unauthorised vehicle may enter. Space has been allowed to delineate this zone by installing Hostile Vehicle Mitigation (HVM) bollards to stop this unauthorised entry, or attack, by vehicles at speed. These bollards, which will supplement planters and hard landscaping elements, will be positioned parallel to the terminal frontage. HVM barriers will also be positioned at each end of the terminal frontage road. The barriers will be removable to allow entry and egress by emergency vehicles. These mitigation measures will be designed to comply with PAS 68 which is the latest Publicly Available Specification for vehicle security to assist in the prevention of terrorism and crime. It identifies vehicle criteria and impact tolerance that must be met in order to conform to the Specification. The bollards, barriers and secure zone will ensure that a vehicle bomb cannot penetrate the terminal; however, a detonation at the 30m stand-off range will still cause a blast wave to impact the terminal. This is mitigated in the design by designing the building frame to British and European standards plus to UK Building Regulations as buildings designed to these standards are generally capable of withstanding the blast without collapse. However, one objective of a terminal is to provide an open and attractive passenger environment and this is commonly provided through the use of glazed facades. This is particularly the case for the smaller terminal building, like Manston Airport, where glazed facades will assist with the light and open environment and not reduce the passenger experience. However, this construction can be a source of deadly fragments in a blast event. To mitigate this; the detail design will minimise the use of glazed facades without reducing the passenger experience. Plus the façade systems will use high strength laminated glass in deeply rebated frames to ensure under blast conditions the fragments remain attached to the plastic interlayer and not be projected into the terminal. The same protection will apply to the terminal doors. The building frame also has to withstand the blast. This frame can either consist of steel or reinforced concrete. To analyse the effects of a blast, dynamic modelling is used and this indicates a steel frame structure is better at withstanding the blast

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		effects. The variety of steel sections also improves the architectural details allowing for the façade material to be easily incorporated and comply with the ASIAD requirements. The risk of a landside package or person-borne explosive detonation is accepted by the ASIAD guidance with measures applied to limit the effects and injuries from such an attack. These do not generally influence the space planning design and are more related to materials. For example; limit glazed balustrades and screens and provide securing constraints to suspend signs and ceiling panels. Within the masterplan the area specified for the terminal building is based on other terminal facilities that have a similar passenger throughput. In general, this is a two storey facility which will allow sufficient space to incorporate a passenger and baggage security screening facilities i.e. Hold baggage screening, individual passenger screening, cabin baggage screening, security staff control station. These facilities will be installed on a phased approach to comply with passenger demand. For example for passenger screening initially, two security lanes will be provided. Customs and Immigration facilities will be provided i.e. custom channels (red, green, blue), interview rooms, Immigration desks, queueing area, one way screens, CCTV, back of house offices in accordance with Border Force Requirements. The Applicant is aware that Border Force requirements could change after March 29 2019 although at this stage this is an unknown requirement, but given any changes will be imposed on all UK airports, it is considered that any such changes will be able to be incorporated into the design. A security gate will be provided to the south of the terminal for controlling airside access. This will be provided with an 'air-lock' facility. This is located near to the terminal so avoids deliveries direct to the terminal and reduces the vehicle risk. Parking facilities and structures are a potential vehicle bomb location and so these have been located outside of the 30m secure zone from the terminal in accordance with ASIAD design. Due to the area and proximity of the car parks the design does not require a customer interface area which would require glazed elements to be blast enhanced. Cargo Facilities: The floor area for the cargo facilities includes an area for the incorporation of Custom clearance facilities. The detailed requirements will be influenced by the cargo operators that will be based at Manston Airport. However, space has been allowed for security screening facilities within the building and the possibility of proving mobile screening units which again depends on the cargo operators and type of cargo being handled. The design therefore incorporates some

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		flexibility depending on type of cargo operations. Security facilities for screening personnel with the building will be provided so they can access the Critical Part area. Management procedures for this process will be included in the Airport's Security Management System. Therefore, facilities and management procedures will ensure that a secure supply chain is maintained from the point of origin to the point of uplift. The detection of narcotics in cargo packages can be assisted through the use of narcotic detection dogs. The masterplan space planning exercise has considered the use of providing an area within the airport for a narcotic detection dog team. The exercise concluded that a mobile detection dog unit would be more effective at the initial development stages. A security gatehouse has been incorporated into the design to provide an initial security check point for the cargo facility. The design of this area incorporates security gates located in front of this security complex and linked to the security fence. If required, this allows the option of securing the facility if an extreme security event occurs. Design development has also considered incorporating HVM measures in the form of barriers. The masterplan has included space for the installation if these barriers if required. Perimeter Security: the majority of the site perimeter is provided with compliant airport security fencing. The ASIAD requirement is for fencing to comply the Standard BS 1722. A preliminary visual inspection indicates that this existing fencing is compliant. However, a detailed inspection will be undertaken and any areas on non-compliant fencing will be replaced. Also, compliant security fencing will be provided for those areas where new developments are proposed i.e cargo facilities. The masterplan has ensured that the development provides the required security clearance adjacent to perimeter fencing i.e. 3m gap. This eliminates the risk of providing a means to access over the security fence. Intrusion of the security boundary has also been considered in the design development stage. The Applicant has reviewed systems that are currently available i.e. sensors, video using analytics and radar. The Applicant has reviewed a radar system, which provides real time information, and is currently being operated at Liege Airport in Belgium. This highlighted the benefits of providing an automated wide area surveillance system. The conclusion was that these systems provide the optimum security coverage across a large perimeter and the Applicant is committed to providing this at Manston. As these systems can be installed at any time without affecting the infrastructure then it does not influence the design of the masterplan.

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		Site wide security: A CCTV system will be installed within the staff and passenger car parks and at strategic landside locations. The system will be linked to a control room within the terminal. A similar system will be incorporated for the cargo facilities with the individual operators also operating their own company system. It will be possible for all the CCTV systems to be linked through a site wide underground fibre optic cable that is proposed will be incorporated around the airport. Perimeter airside roads adjacent to the site boundary are provided to allow for access and inspection of the secure perimeter. The design measures in the masterplan and subsequent detail design will be part of a larger counter-terrorist security strategy that will include the airport, police and security services. Effective security plans will be developed in tandem with detailed design to ensure that an effective strategy is enacted. Finally a Security Management System will be developed in accordance with CAA and DfT guidelines to manage security risks effectively and efficiently.
LV.1.31	The Applicant	**Design** – **Customs, immigration and security** Paragraph 6.46 of the Planning Statement [APP-080] states that: *"It is noted that the Examining Authority and Secretary of State will take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security standards which the design has to satisfy."* **Show:** **i. where these standards are set out in the application documentation; and** **ii. where is it demonstrated that the design has satisfied these standards.**
		Applicant's Response: i. These standards are not set out in the application documentation but the Examining Authority and Secretary of State can be satisfied that compliance will all relevant standards will be achieved through the Civil Aviation Authority (CAA) aerodrome

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		certification process. Granting of a CAA aerodrome licence will demonstrate the aerodrome has met the required operational, safety and security standards required. In order to achieve an aerodrome licence, the Applicant will be required to produce an Aerodrome Manual. The requirements for this document are described in the CAA's Civil Aviation Publication (CAP) 168 'Licensing of Aerodromes': *An application for an aerodrome licence should be accompanied by an aerodrome manual produced in accordance with CAP 168. … The manual will be regarded by the CAA as the primary indication of the standards likely to be achieved by the aerodrome operator* *Supported by the Safety Report, it is the safety assurance document for the CAA's licensing process, and a management tool for industry. The manual is the source document describing how operational procedures and their safe management will be delivered.* As has been described in the CAA Interface Document [APP-086], a CAA licence application which includes an Aerodrome Manual is a key stage of the design process which takes place post DCO. The Applicant is committed to producing the required documentation and will need to do so in order to achieve a CAA License. ii: The aerodrome masterplan has been created in accordance with the CAP 168 and European Aviation Safety Agency (EASA) aerodrome licensing requirements to ensure the development complies with the licensing requirements. Examples include • Taxiway and runway widths and safety clearances. • Positioning of the aircraft stands and building heights have been checked to ensure they do not infringe the estimated obstacle limitation surfaces (an allowance made for changes in ultimate final geometry). For example a safeguarding process has been undertaken • A check to ensure that sufficient space exists for Runway End Safety Areas (RESA's). • Design of the vertical and horizontal geometry for the new aprons and taxiways to ensure compliance is achieved.

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		• A preliminary check that the alignment of existing aircraft pavements are compliant and assessment of any remedial required. A final assessment will be undertaken during the detail design process. Ensuring that the design complies with CAA and EASA requirements demonstrates that the new and existing infrastructure will provide the required operational and safety standards required for an operational airport. Reference to aerodrome licensing requirements have been integral to the creation of the masterplan but have not been exhaustively listed in the application document. Ultimately an aerodrome license will only be granted if the relevant standards are met which can only be checked once detailed design is undertaken. Within the application, documents providing further information regarding the licensing process can be found in the CAA Interface Document (APP-086).
LV.1.32	The Applicant	**Design** – **Customs, immigration and security** Paragraph 3.49 of the Planning Statement [APP-080] states that suitable security, customs and border check point facilities would be constructed at the site access points and at cargo building facilities. **i. Show where these are included in the masterplan, engineering drawings, or in the Design and Access statement.** **ii. Show how the positioning of these has influenced the design of proposals for the internal road network.**
		Applicant's Response: i. A main site gatehouse is required to control access to the site from the public highway, this is shown on the works plans as Work 14 on Works Plan 2 of 5 (APP-018). The security gatehouse has been incorporated into the design to provide an initial security check point for the cargo facility. The design of this area incorporates security gates located in front of this security complex and linked to the security fence. If required, this allows the option of securing the facility if an extreme

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		security event occurs. Design development has also considered incorporating HVM measures in the form of barriers. The masterplan has included space for the installation if these barriers if required. A 'perimeter road' is shown on the masterplan following the site boundary. This is not included in the work plans as this will be an access track of limited width which is used for patrol vehicles to ensure the integrity of the site boundary fencing. The European Aviation Safety Agencies Certification Specifications and Guidance Material for Aerodromes Design CS-ADR-DSN Issue 4 Dec 2017 is effectively the 'design manual' for modern aerodromes in the UK. GM1 ADR-DSN.T.900 (7) & (8) state: *(7) To facilitate the control and maintenance of the fencing, a perimeter service road should be constructed inside the aerodrome fencing.* *(8) Perimeter service road is also used by security patrols.* The perimeter road shown on the masterplan acknowledges this requirement. Further design to ensure that security measures are sufficient will take place at Detailed Design. Intrusion of the security boundary has also been considered in the design development stage. We have reviewed systems that are currently available i.e. sensors, video using analytics and radar. We have reviewed a radar system, which provides real time information, and is currently being operated at Liege Airport in Belgium. This highlighted the benefits of providing an automated wide area surveillance system. Our conclusion was that these systems provide the optimum security coverage across a large perimeter and we are committed to providing this at Manston. As these systems can be installed at any time without affecting the infrastructure then it does not influence the design of the masterplan. The design measures in the masterplan and subsequent detail design will be part of a larger counter-terrorist security strategy that will include the airport, police and security services. Effective security plans will be developed in tandem with detailed design to ensure that an effective strategy is enacted.

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		A security zoning plan has been developed to show the planned security zoning of the development. This is a live document as correct security zoning must reflect operational realities; the current security zoning map has been included as Appendix LV.1.32 at TR020002/D3/FWQ/Appendices. Finally a Security Management System (SeMS) will be created for the site the guiding principles of this document are described in the Civil Aviation Publication (CAP) 1273. *The purpose of a Security Management System (SeMS) is to enable an entity to identify and manage its security risks and be assured right up to Board level that the security measures taken to manage those risks are effective.* CAP 1273 goes on to say: *To realise that concept, the SeMS requires several practical components to be in place. Many of these may already exist within an entity, but may need to be made more rigorous, reliable, consistent, repeatable, and effective. The SeMS project discussed below is a practical approach to assessing these components and removing loop-holes, weaknesses, gaps and duplications.* ii. The Internal access road from the main gatehouse is positioned such that it remains landside with connections shown on the masterplan to access the ATC and Apron areas. The perimeter track is positioned to follow the proposed site boundary fence. This access track will be developed in tandem with the specific requirements of the site perimeter fencing. Passing places, elevation and site lines will be developed such that the integrity of the perimeter can be maintained. The Application acknowledges that the perimeter road is integral to the security of the site and hence it's inclusion in the application masterplan.
LV.1.33	The Applicant	**Design** – **Customs, immigration and security**

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		Paragraph 6.53 of the Planning Statement [APP-080] states that paragraph 4.64 of the Airports NPS recognises that the nature of the aviation sector as a target for terrorism means that security considerations will likely apply in the case of the infrastructure project for which development consent may be sought under the Airports NPS. The ExA notes the statement in table 14.4 of the ES Volume 3:Main Text – Chapters 17 – 18 [APP-035] that Airport security and resilience is fundamental to EASA licensing and that Relevant CAP and CAA guidelines will be followed including those of security. **Explain how this consideration has been built into the design of the proposed scheme.**
		Applicant's Response: The development of the Proposed Development at the detailed design stage will comply with all relevant CAA and CAP guidance related to security and terrorism prevention. At the level of design development within the DCO application, consideration of security measures have resulted in the following: • An area allowed for construction of a vehicle free zone in advance of the passenger terminal (see illustrative drawing RPS-MSE-XX-DR-C-2083 entitled 'Design Drawings – Proposed Terminal' at APP-031). • Perimeter roads to maintain security of the perimeter fence. • Identification of a security 'Critical area' around the passenger stands. All security measures will be reviewed and developed as the scheme progresses through outline and detailed design stages as described in the planning statement and though submissions to the CAA for aerodrome licensing.
LV.1.34	The Applicant	**Design** – **Customs, immigration and security**

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		Paragraph 6.53 of the Planning Statement [APP-080] states that paragraph 4.65 of the Airports NPS states that where national security implications have been identified, the applicant should consult with relevant security experts from the Centre for the Protection of National Infrastructure and the Department for Transport to ensure that physical, procedural and personnel security measures have been adequately considered in the design process, and that adequate consideration has been given to the management of security risks. **i. Confirm if national security implications have been identified.** **ii. State whether discussions took place with the Centre for the Protection of National Infrastructure in advance of the application for a DCO being made.** **iii. Show how any such discussions influenced the design of the proposed scheme.** **iv. State whether you consider that the scheme, if consented, would constitute 'Critical National Infrastructure'.**
		Applicant's Response: i. Beyond the essential aviation security implications for a passenger and freight airport, no specific or particular security implications have been identified. Security arrangements will include screening of passenger, baggage, cargo goods and staff. Provision of controlled access points and a secure physical boundary fence. These and the design of public accessed buildings i.e. passenger terminal will follow the guidance in the DfT document 'Airport Security in Aviation Development (ADIAD). Further information regarding security implications is provided in the responses below, in particular the response to question iv. As part of the Airport's operational procedures a Security Management System (SeMS) will be created, the guiding principles of this document are described in the Civil Aviation Authority Publication (CAP) 1273.

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		The purpose of a Security Management System (SeMS) is to enable an entity to identify and manage its security risks and be assured right up to Board level that the security measures taken to manage those risks are effective. CAP 1273 goes on to say: *To realise that concept, the SeMS requires several practical components to be in place. Many of these may already exist within an entity, but may need to be made more rigorous, reliable, consistent, repeatable, and effective. The SeMS project discussed below is a practical approach to assessing these components and removing loop-holes, weaknesses, gaps and duplications.* Some of the essential aviation security implications which have resulted in inclusions in the masterplan layout include the requirement to control access to the airfield, shown through the use of security gates. A requirement to control access within the site to 'airside' areas, shown through internal fencing and additional security gates. A requirement to maintain boundary security through the inclusion of an ASIAD approved security perimeter fence and inclusion of a perimeter road adjacent to this boundary fence for maintenance and security monitoring. Consideration has also been given to the inclusion of an automated site wide area surveillance system. Further details regarding this and proposed security measures are identified in response to LV 1.30. ii. No discussions took place with the Centre for the Protection of National Infrastructure (CPNI) in advance of the DCO application as the Applicant did not consider the scheme to constitute a development covered by the CPNI (see iv below for further details). This is further explained in the response iv below. However, since receiving the above Written Question the Applicant has approached CPNI for confirmation of the Applicant's assessment. An update will be provided at Deadline 4. iii. The outline design of the Proposed Development takes into account the essential elements of aviation security as pertinent to such a development.

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		The development will comply with the Aviation Security Regulations 2010 and Airport Security in Aviation Development (ASIAD) and include the following: • Utilising the existing security gates and facilities so access airside is controlled • Provide the required ASIAD security and anti-terrorism measures for the passenger terminal This includes compliant secure zones and blast mitigation in the building design • Passenger and baggage security clearance facilities within the passenger terminal i.e. Hold Baggage screening, individual passenger screening, cabin baggage screening, security staff control station • Maintain the existing compliant perimeter security fence and provide new compliant fencing where required to maintain a secure and compliant airside boundary • Establish the security 'Critical Part' areas for the cargo and passenger facilities and ensure facilities and procedures are installed to provide controlled access • Provide security screening facilities for people and goods within the cargo handling facilities. This will ensure that the secure supply chain is maintained from the point of origin to the point of uplift. • A Security Management System will be developed in accordance with CAA and DfT guidelines to manage security risks effectively and efficiently. With regard to customs and immigration measures the following have been considered • Within the passenger terminal the appropriate facilities will be provided in accordance with Border Force requirements. These will include as a minimum: o Custom Channels o Interview rooms o Immigration desks, queuing area, back of house offices • Designated areas within the cargo facilities for customs clearance will be provided The Applicant will also be utilising the latest compliant technology that is available throughout the development and operation of Manston Airport.

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		iv. The Applicant does not consider the scheme to constitute "Critical National Infrastructure" due to the following: The CPNI website states: *Not everything within a national infrastructure sector is judged to be 'critical'. The UK government's official definition of CNI is:* *'Those critical elements of infrastructure (namely assets, facilities, systems, networks or processes and the essential workers that operate and facilitate them), the loss or compromise of which could result in:* *a) Major detrimental impact on the availability, integrity or delivery of essential services – including those services whose integrity, if compromised, could result in significant loss of life or casualties – taking into account significant economic or social impacts; and/or* *b) Significant impact on national security, national defence, or the functioning of the state.'* On the above basis, the Applicant does not consider the Application to constitute CNI. Beyond providing the essential aviation security implications that are required for a CAA licensed passenger and freight airport, no specific or particular implications have been identified. However, as noted above in response to (ii) since receiving the above Written Question the Applicant has approached CPNI for confirmation of the Applicants assessment. An update will be provided at Deadline 4.
LV.1.35	The Applicant	**Design – Customs, immigration and security** Advice from the Centre for the Protection of National Infrastructure is that:

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		Before taking any decisions, a full risk assessment should be undertaken within each individual location to understand the various threats and vulnerabilities and their potential impacts to help identify the most appropriate security response. (https://www.cpni.gov.uk/advice). The ExA notes the statement in table 14.4 of the ES Volume 3:Main Text – Chapters 17 – 18 [APP-035] that Airport security and resilience is fundamental to EASA licensing and that Relevant CAP and CAA guidelines will be followed including those of security. **i. State whether such risk assessment has been undertaken.** **ii. If it has, either show where it is set out in the application documentation, or provide it.**
		Applicant's Response: i. The Applicant has not at this stage undertaken the Airport security and resilience assessment that will subsequently be required as part of the European Aviation Safety Agency (EASA) Aerodrome Certificate application as mentioned in Table 17.4 (rather than 14.4) of the ES Volume 3: Main Text – Chapters 17 – 18 (APP-035) . Such assessments require analysis of both current and emerging security threats and the measures that the airport has put in place to address them; this will include a physical inspection of facilities and processes by the Civil Aviation Authority (CAA). It is therefore not possible to conduct such an assessment at present. However, a full security assessment will be conducted against the extant regulations as part of the certification assessment process by the CAA. Importantly, this is not taken as a snapshot; Manston Airport would be subject to a comprehensive ongoing audit programme by the CAA to ensure continued compliance with both current and emerging regulations with regard to operational resilience and security. ii. The Applicant has not yet commenced the CAA's regulatory process under the Civil Aviation Act 2012. However, the Applicant has had exploratory meetings with the CAA to discuss and agree the certification process to be followed. The start of the certification and licensing application is expected in the latter part of 2019 with a submission to the CAA in 2020.

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LV.1.36	The Applicant	**Lighting** Paragraph 11.6.17 in Chapter 11 Landscape and Visual, in ES Volume 2[APP-034] states that it is not expected that there would be any significant lighting effects as a result of the Proposed Development. It goes on to state that the lighting of the Proposed Development will be the subject of further development and assessment and as this takes place the design should be reviewed and more detailed modelling of the likely impacts undertaken. **i. Justify the expectation of no significant lighting effects given that more detailed modelling of likely impacts is yet to be undertaken; and** **ii. State when and in what form that more detailed modelling will be made available to the ExA.**
		Applicant's Response: i. A LVIA addendum has now been produced which assesses the visual effects of lighting on night-time views from the viewpoints for which night-time photography has been undertaken. The effects of lighting during daytime hours are not considered significant. The addendum is submitted as Appendix LV.1.36 in TR020002/D3/FWQ/Appendices. ii. The LVIA addendum contains two appendices; a baseline lighting report and an external lighting strategy (which contains more detailed design and modelling).
LV.1.37	The Applicant	**Lighting** As examined at the ISH into the dDCO held on 10 January 2019, the height of the new high mast lighting for aprons and stands referenced in, for example, paragraph 1.14 of the Planning Statement [AP- 080] and paragraph 2.2 of the Draft Explanatory Memorandum [APP-007] is not secured in the dDCO [APP-006].

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		Given this, how were any possible effects of this lighting on potential receptors assessed?
		Applicant's Response: Paragraph 3.3.17 of the ES (APP-033) stated that "*High mast lights would provide the required lighting for operational aircraft stands; it is expected these will vary in height from 15m to 25m*". Further design development since the submission of the ES and which is included in the lighting strategy which forms an appendix to the LVIA addendum (included as Appendix LV.1.36 in TR020002/D3/FWQ/Appendices) confirms that lighting columns would be no higher than 25m (at Aprons 1, 4, 5 and 6). Lighting would be mounted at 22m high at Apron 2 and 15m high at Apron 6. It is these heights that have formed the basis of the assessment of the effects of lighting on night-time views in the LVIA Addendum. Additional descriptions of lighting are provided in Chapter 3 of the ES at paragraphs 3.3.75 and 3.3.78. Baseline descriptions the night-time lighting environment are provided in paragraphs 11.4.10 and 11.4.42 – 11.4.44 with radiance levels shown on Figure 11.39 (APP-041). Night-time photography is included in Figures 11.22a to 11.29 (APP-041) and descriptions of the night time views is provided in Appendix 11.3 (APP-057). All of this has provided a good understanding of the baseline night-time situation and allowed an assessment of the general effects of lighting within the airport to be made in relation to landscape character. The LVIA addendum (Appendix LV.1.36) assesses the effects of lighting on night-time views now that more detailed design work has been undertaken and is presented in Appendix A of this addendum.
LV.1.38	The Applicant	**Lighting** Para 11.1.9 in Chapter 11 Landscape and Visual, in Environmental Statement Volume 2 [APP-034] states that as the detailed design process moves forward additional information will be provided and the information contained here will be confirmed through more detailed modelling of the lighting conditions at specific receptors. **State the timescale for this more detailed modelling and the deadline at which it will be entered into the Examination.**

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		Applicant's Response: An external lighting strategy forms an appendix to the LVIA addendum and contains more detailed designs with regard to external lighting. The addendum assesses the visual effects of this lighting on night-time views from the viewpoints for which night-time photography has been undertaken. The LVIA addendum is submitted as Appendix LV.1.36 in TR020002/D3/FWQ/Appendices.
LV.1.39	The Applicant	**Lighting** **Either:** **i. show where the impact of lighting on aircraft landing at, and taking off from, the proposed scheme on potential receptors has been assessed; or** **ii. Provide such an assessment.**
		Applicant's Response: i. The LVIA does not include an assessment of the effects of lighting on aircraft landing at, and taking off from, the Proposed Development on potential receptors. The LVIA authors did not consider that the effects of lighting on aircraft would give rise to significant visual effects and no request to include an assessment of lighting on aircraft was made by consultees either during the scoping or the statutory consultation phases. ii. A statement as to why the presence of lighting on aircraft is not considered to be significant has been added to the LVIA addendum, included as Appendix LV.1.36 in TR020002/D3/FWQ/Appendices.

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LV.1.40	The Applicant	**Northern Grass** **Can the Applicant confirm whether planting, bunding or screening is proposed in the Northern Grass buffer zone area and what benefit the final treatment provides in terms of mitigation for adjacent properties, since each treatment would provide somewhat different mitigation?**
		Applicant's Response: The LVIA is based upon the provision of a low bund within the buffer zone area along the eastern and western edges of the Northern Grass Area which itself would be planted with trees and shrubs. The bunding would allow for additional height and therefore screening benefits of the planting to be achieved. The planting, as it gradually matures, would soften and filter views of the built form proposed within Northern Grass Area. A combination of structural planting is proposed in the north west, northern and eastern boundaries, and is located on earth bunding where possible, to provide visual containment to the development. The extent of screening is restricted along the north eastern boundary due to the limitations imposed by the radar area, so planting is restricted to existing mature trees only, with new planting being introduced on the south side of the grass area to provide screening from long views into the site. The proposed planting is generous in nature and will, in time, establish as a mature woodland belt to provide screening of the proposed development from outside the site. The new areas of planting respond to existing boundary vegetation and, where possible, build on it to provide a generous landscape setting for the built form.
LV.1.41	The Applicant	**Air Traffic Control height** **Can the Applicant confirm whether the maximum ATC height stated in Schedule 1 Work No 3 of the dDCO (APP-006] is correct or whether engineering drawings and sections – building height is correct in constraining the ATC**

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		height to 24m? The Applicant should update the dDCO as necessary and confirm what the implications are for the landscape and visual impact assessment and for the proposed ground levels.
		Applicant's Response: The maximum ATC height stated in Schedule 1 Work No 3 of the dDCO [APP-006] is correct (27m). There is an error on the Engineering Drawings and Sections – the error relates to the finished ground level rather than the maximum roof level. The correct ground level is 47m, and not 50m as shown. An updated drawing is included as Appendix LV.1.41 in TR020002/D3/FWQ/Appendices. A maximum building height for the ATC of 27m is what has been assessed in the landscape and visual assessment.
ND.1 Need		
ND.1.1	The Applicant CAA	**Planning Statement (APP-080]** Paragraph 5.18 of the Planning Statement [APP-080] states, in relation to the question of whether or not the Aviation Policy Framework is out of date, the Applicant's view that this is the case on matters relating to airport expansion: *"...since the conclusions of the Airports Commission's brief (July 2015) to find an effective and deliverable solution to increase aviation capacity in the South East as well as supporting the UK."* **In what way, if at all, did Manston Airport feature in the Airports Commission deliberations on aviation capacity in the South East?**

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		Applicant's Response: In summary, the Airports Commission considered Manston in its early stages primarily in a passenger context, but once it had reduced the options to the three shortlisted ones (plus further consideration of the Thames Estuary option) in its Interim Report, it did not consider Manston further. A number of submissions were made at different stages of the Airports Commission's process by the previous owners of the airport, Infratil, including in response to the initial call for proposals and prior to the publication of the Interim Strategy document and its accompanying Appendices; meetings were also held with the Commission Secretariat. These submissions sought to highlight the potential value that the long runway and existing under-utilised airfield infrastructure at Manston could provide cost effectively to add significant incremental capacity to South East airport system. This was in the context of the Commission's remit to examine *"… the scale and timing of any requirement for additional capacity to maintain the UK's position as Europe's most important aviation hub, and it will identify and evaluate how any need for additional capacity should be met in the short, medium and long term*" (Airports Commission Terms of Reference 2013). In the first Phase of their work in 2013, the Commission concentrated solely on examining options for short and long term capacity that might be capable of playing a role in the South East air passenger (not freight) market. The proposals in the initial submission are addressed in Airports Commission: Interim Report (Appendix 2: Assessment of Long-term Options, Dec 2013), which ruled out Manston at the sifting stage on the grounds that it did not meet the Commission's passenger-driven remit of providing a substantial additional *long-term* capacity as effectively as other long term options. The commentary in the report states that although Manston *"…does not address the larger question of London & South East [passenger] capacity*", it *"… presents some potential as a reliever airport …"*. In other words, it was unlikely to make a big enough contribution to meeting core passenger capacity requirements, but as the Interim Report itself highlights it does offer short/medium term potential as a '*reliever airport'* or in the eventuality that, for whatever reason, no new runway is actually ever built in the South East. It was not until December 2013 that the Airports Commission received a report setting out the current state and structure of the UK air freight industry, hence it was only in Stage 2 of their work post publication of the Interim report, which focused

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		on a detailed appraisal of 3-4 short-listed options for new runways, that air freight capability became a material consideration for the Commission and by that stage only the short-listed options remained under consideration. This timescale also coincided with the sale of the Airport by Infratil (in November 2013) to Manston Skyport Ltd – owned by Ann Gloag – which meant that no more was done to build upon the 'reliever airport' designation the Commission had given to Manston. It is important to highlight, moreover, that unlike during the preparation of the 2003 Air Transport White Paper, the Government did not have a modelling tool capable of forecasting the scale and distribution of future growth in air freight, under the strategic options it was examining for South East Airport Capacity. The Commission therefore only considered air freight capacity part of its broader and more qualitative 'strategic fit' and 'wider economic' assessment work streams during late 2014 and early 2015, building it into the reporting of the Business and Sustainability Cases as a material consideration affecting its final conclusions and recommendations to Government. There is certainly significant evidence from the Commission's final report and supporting Business Case annexes published in June 2015 that air freight capability was an important differentiator between the Heathrow and Gatwick runway options. The ability of the preferred Heathrow option to substantially increase air freight capacity within the South East airport system was also mentioned as a material consideration in the Government's support for that scheme as reflected subsequently in the Aviation National Policy Statement (NPS) in June 2018. Finally, the NPS confirms (in Para 1.39 and in a separate document entitled Making Best Use of Existing Runways published concurrently), that despite the approval of a new runway at Heathrow in line with Airports Commission recommendations (Para 2.22), the Government supports making better use of capacity at other existing airports (including in the South East), provided that it is compatible with the approval of new capacity at Heathrow (Paras: 1.41 and 1.42). This is both an acknowledgement that other airport infrastructure in the South East of England (and elsewhere in the UK) has an important role to play in meetings the UK's future airport capacity needs – both passenger and freight, but also a reference back to the reliever airport role that the Commission's Interim Strategy flagged for smaller South East airports. The Applicant has submitted substantial supporting evidence that Manston fulfils such a need, particularly as an airport focusing on dedicated freighter operations.

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ND.1.2	The Applicant	**Draft government Aviation Strategy** Paragraph 1.47, 1st bullet of the Planning Statement [APP-080] states that: *"The Government in its draft Aviation Strategy make it clear that there is an urgent need for additional runway capacity in the South East of England and specifically for air freight. Without new airport infrastructure, the objectives of the Government's aviation policy cannot be fulfilled."* **i. Does the Strategy explicitly refers to Manston Airport?** **ii. If not, could you set out your analysis of the applicability of the Strategy for Manston?**
		Applicant's Response: i. Neither of the documents refer to Manston explicitly; the airport was closed at the time they were written. ii. The Secretary of State's foreword to 'Beyond the Horizon – The Future of Aviation in the UK: A Call for Evidence on New Strategy' (July 2017) explained that: *"This document also sets out our belief that there is a need for all airports in the UK to make best use of their existing runways, while giving due consideration to environmental issues, such as noise and air quality*". The 'draft' policy was given effect in Beyond the Horizon - The Future of UK Aviation: Making Best Use of Existing Runways, published in June 2018 alongside the final version of the Airports NPS supporting a third runway at Heathrow. Neither of these documents *explicitly* mention Manston, nor does 'Next Steps Towards an Aviation Strategy (April 2018)' which the Government published in the intervening period. This document was positioned as a place-holder to allow "a period of engagement and policy development" as part of a long running process leading ultimately to a White Paper. It set out some key objectives for a future White Paper, a number of which are relevant to Manston including: "*reducing barriers*

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		to the movement of freight" and "*looking at whether regions are suitably connected by either air or surface transport to the rest of the UK and to key overseas markets".* On 17 December 2018, Aviation 2050: The Future of UK Aviation Green Paper was published and is currently being consulted upon. The consultation is due to close in April 2019. The Green Paper explains that "*The government recognises the importance of rebalancing the UK economy through economic growth of the regions and ensuring that the UK remains competitive after we leave the European Union. Airports have a crucial role to play as hubs for growth within and beyond the region in which they are situated."* It explains that the Aviation Strategy consultation focuses on supporting freight, among other matters (see page 14 of the Green Paper). It recognises, at paragraphs 1.19 – 1.20 that "*There were record quantities of freight handled by UK airports in 2017, highlighting the growing importance of aviation to the transport of freight. Globally, air freight grew more than twice as fast as overall global trade during 2017 – the widest margin of outperformance since 2010. The changing nature of the goods and services we trade means that aviation freight is becoming increasingly significant to the economy, transporting high value, high tech products, medicines and just in time deliveries.* *This highlights the need for further capacity – delivered sustainably and in a way that benefits the whole country […]"* The economic benefits of air freight are recognised in the Green Paper, particularly at paragraphs 4.45 and 4.46 which record that air freight "*connects UK exporters to new markets across the world, and benefits customers who increasingly have access to a range of globally sourced goods which can be delivered within days of ordering. Air freight facilitates trade that otherwise may not be viable, for example for goods with a short shelf life.*

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		Air freight and those businesses that support it deliver over 46,000 jobs and contributes over £1.4 billion to the UK economy." Paragraphs 4.49 – 4.50 of the Green Paper state: *'The government supports continued growth of the air freight sector particularly making best use of existing capacity at airports, to continue to facilitate global trade for UK businesses and consumers. It has already taken action by supporting the Northwest Runway scheme at Heathrow, which has been estimated to nearly double the capacity for freight at the airport to 3 million tonnes per year."* *Since the call for evidence, the government has worked with the industry to examine the potential barriers to the air freight industry and how it can help reduce them. This work will continue; the government is committed to removing or reducing any unnecessary barriers to air freight and the global trade that supports it, including in non-aviation areas of policy."* Whilst the Green Paper does not specifically mention Manston, it does clearly point to a policy approach which is supportive of the principle of bringing existing airport infrastructure back into use to facilitate the continued growth of the air freight sector in the UK. It is anticipated that those sentiments will be reflected in the final Aviation Strategy White Paper, which will create a policy framework that is supportive of air freight led development of the kind proposed in this application.
ND.1.3	The Applicant	**Assessment of Strategic Site Alternatives NTS (APP-032]:** Paragraph 2.1.13 of the Environmental Statement - Non-Technical Summary [APP-032] states: *"A range of alternative strategic sites were considered, these being airfields in the south-east and London's six main airports: Stansted; Heathrow; Gatwick; Luton; London City; and Southend. However, each of the above has major shortfalls in terms of successfully supporting an increased freight and passenger capacity (Table 2.1)".*

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		Provide the detailed assessment of strategic sites that supports Table 2.1(APP-032] and Table 2.1 of the ES (APP-033] over and above that provided in paragraphs 2.3.5 -2.3.27 of the ES (APP-033].
		Applicant's Response: The Applicant has provided detailed assessment of each of the airports listed in this question. These can be found in Volume I Chapter 5 of the Azimuth Report [APP-085]. Whilst other airports were reviewed, none in the South East were found to be suitable for additional freighter operations.
ND.1.4	Azimuth Associates	The ExA notes that the Azimuth Report [APP-085] does not deal specifically with alternative sites. **Why is that?**
		Applicant's Response: The Azimuth Report (APP-085) considers alternative existing airfields at Volume I Section 5. The Section demonstrates that other South East airports cannot accommodate the forecasts for demand for freighter capacity. In particular the Section considers: • Stansted Airport • Heathrow Airport • Gatwick Airport • Luton Airport • City Airport • Southend Airport • Biggin Hill • Bournemouth

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		• Farnborough • Lydd • Northolt • Rochester • Shoreham • Southampton Aside from these existing airports (which are all demonstrated to be unsuitable for various reasons), there are few other options for increasing air freight capacity in the South East. The once proposed Thames Estuary Airport was ruled out as an option, with the Airports Commission saying its substantial disadvantages outweighed its potential benefits. Any other site that had not been an airport before would similarly involve a large number of additional negative factors. Both national and local policy encourages the maximising of existing infrastructure over new airports. For example, paragraph 4.49 of Aviation 2050: The Future of UK Aviation Green Paper states that, *"The government supports continued growth of the air freight sector particularly making best use of existing capacity at airports, to continue to facilitate global trade for UK businesses and consumers".* As discussed at paragraph 2.1.6 of Volume I of the Azimuth Report (APP-085) Kent County Council's 'Vision for Kent 2012-2022' (Kent Forum, 2012) refers to its opposition to new airport proposals in explaining its support of the expansion of existing airport infrastructure. As set out at Section 5.8 of Volume I of the Azimuth Report (APP-085), the characteristics of an optimal freight-focused airport are: • A paved runway with a length of at least 2,500 metres and capable of supporting CAT II/III operations • Existing infrastructure with capacity to provide facilities for new air freight operators according to demand • Certified, or the ability to obtain an Aerodrome Certificate from the European Aviation Safety Agency (EASA) or other relevant licensing organisation, for the operation of the types of aircraft currently used and likely to be used in the future by airfreight operators • Capacity to accommodate dedicated air freighters and warehousing hold freight

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		• Operations not focused on passenger or other markets that would negatively impact air freight operations • Availability of new slots/landing times for airfreight operators and a flexibility of existing slots/landing times • Sufficient warehousing and handling facilities • Good surface access to the strategic road network with no bottlenecks to access in or around the airport, with an additional advantage of a good connection to high quality public transport infrastructure • Airspace that is outside of the London Control Zone (also known as the Controlled Traffic Region (CTR)) to provide maximum flexibility and capacity for airport operations • Located in the south-east of England close to the main significant population and commercial centres, with an additional advantage of a good connection to continental Europe Manston Airport is the only option that meets these characteristics in the South East. Manston could be operational in as little as two years from the transfer of its ownership to an airport operator. Its strategic location, runway length and potential to accommodate all necessary infrastructure together with the considerable local backing mean it is without comparison in the UK.
ND.1.5	Azimuth Associates	Reference is made on page II in the Azimuth Report [APP-085] to air freight capacity being full (footnote 5). However, the news report linked to states that capacity was reached (in November/December 2017) for the first time in 10 years and later on references Christmas as being a reason, with quotes that costs tailed away after this specific week. It appears therefore that this report references a single point in time. **What is your view on this interpretation?**
		Applicant's Response:

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		The interpretation is correct. However, the reference indicates that airports across Europe are operating at capacity at peak times. It is not generally possible to smooth demand across the year and across the day.
ND.1.6	Azimuth Associates	Page II of [APP-085] states that airport capacity constraints is a plausible explanation for why the UK appears to carry a lower percentage of air freight in dedicated freighters as opposed to bellyhold. **Could you expand on your reasoning of why the UK freight market is dominated by bellyhold freight?**
		Applicant's Response: The Applicant's reasoning, described in the following paragraphs, is that capacity shortages at UK airports are restricting the market for dedicated freighters, both in terms of runway capacity but also freight handling facilities, resulting in a domination of bellyhold freight in the UK. Whilst bellyhold air freight currently dominates by percentage in the UK, this is the reverse of the position globally (UK 70/30 Global 44/56), where dedicated freighter capacity is more freely available. For example, in 2018, Frankfurt Airport, which has four runways, moved 63% of freight on dedicated freighters, a sharp contrast to the picture in the UK. The full record from the Monthly Traffic Results Frankfurt Airport with Annual Report for December 2018 is shown below: "*Despite a lower load factor for freighter aircraft, the increased offer of main deck capacities effected a slight increase (+0.5 %) of freight on freighter aircraft (including transit). Bellyhold freight was down by 3.2 %. The share of freighter aircraft freight in 2018 climbed to a new record level of 63.0 %. This is 0.3 percentage points above the old record set in 2016."* (Page 7) This is a clear indication that the UK freight market is out of step with the rest of the world. Connectivity plays a major role in providing shippers with a choice between bellyhold and pure freight options and certainly Heathrow is the world's most connected airport (2018 figures). However, despite Asia ranking highly in terms of connectivity, around 80% of the air freight

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		between Asia and Europe is carried on dedicated freighters. Frankfurt also enjoys a high level of connectivity but ship 63% of freight on dedicated aircraft. The figure for Paris is 50% and for Schiphol is 60%. Taking all of the above into account, the Applicant considers that capacity constraints in the UK airport network, particularly in the South East provide an explanation for why the UK freight market is currently dominated by bellyhold freight.
ND.1.7	Azimuth Associates	Page II of the Azimuth Report [APP-085] states that it is clear that the aviation market prefers the South East and that without extra capacity 2.1million tonnes of freight would be diverted mainly to Northern European Airports. **i. State the extent to which you have analysed possible diversion to UK airports outside the South East;** **ii. Would it not be quicker, cheaper, and easier to divert to other UK airports not in the South East rather than to Northern Europe?**
		Applicant's Response: i. The figures used in the report are drawn from the York Aviation 2015 work for the Freight Transport Association and Transport for London (Appendix ND.1.7 in TR020002/D3/FWQ/Appendices). This work has been used by both agencies to respond to Government consultations. Research on behalf of the Applicant was conducted with a number of stakeholders including the 24 listed in APP-085 Volume II, Table 3 on page 23. These interviews described the current problems with UK air freight. In particular interviewees talked of slot restrictions at Heathrow, of getting bumped from bellyhold freight and of the need to truck to and from European airports. Evidence of large number of truck movements between the UK and Europe was provided that corroborates the findings by York Aviation in their 2015 work. York Aviation's work uses a gravity model to show how excess air freight demand from the London system might be served by trucking to other airports in the UK and on the continent. This model shows that Paris CDG would receive 34%, Amsterdam Schiphol 19%, and Frankfurt 18%. In the UK, York predicts that Birmingham would receive 13%, East Midlands 8% and

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		Manchester 7%. These figures suggest that 71% of excess air freight demand in the London area would be lost to continental airports, which could clearly be met by Manston instead. ii. No. Although there would indeed be advantages to using a UK airport rather than one in Northern Europe, without additional capacity including handling facilities, runway slots, warehousing, etc. existing UK airports are not the first choice for freight operators. Northern European airports do have these facilities and a wider network of destinations being served, which makes them more attractive than airports in the UK. The time taken to load and offload aircraft – particularly the time from an aircraft landing to the arrival of goods at their final destination – is a key factor in the choice of airport used by freight airlines. The lack of capacity at congested south east passenger airports to undertake the unloading/loading and transhipment process quickly and easily is the reason northern European airports are being used as an alternative for freight destined or originating from London and the South East. This flow of cross channel traffic and the opportunity to capture it close to the main source of demand, forms a key part of the Applicant's rationale for reopening Manston Airport.
ND.1.8	Azimuth Associates	**How would trucking times from the Proposed Development to central or north London compare with those from East Midlands or Stansted Airport?**
		Applicant's Response: The Table below sets out peak period (Arr 9.05 am) and off-peak (Arr 11.20 am) trucking times to representative destinations around the M25 and in Central London: - Nine Elms – Central London - Sainsbury's Distribution Centre – Waltham Cross (M25 North) - Sainsbury's Distribution Centre – Dartford (M25 East) - Cargo Centre – Heathrow (M25 West)

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		– Mail Centre – Gatwick (M25 South)

Airport	Destination				
	Nine Elms (C)	Waltham Cross (N)	Dartford (E)	Heathrow Cargo (W)	Gatwick Mail (S)
AM Off-Peak					
DHL EMA	2hrs 20m - 4hrs 20m	2hrs 5m	2hrs 20m - 3hrs 20m	2hr - 2hr 40m	2hrs 40m - 4hrs
Manston	1hr 30m - 2hrs 50m	1hr 30m	55m - 1hr 20m	1hr 40m - 2hrs 20m	1hr 25m - 2hrs
Stansted	1hr 5m - 2hrs	30m - 40m	45m - 55m	1hr 5m - 1hr 25m	1hr 15m - 1hr 40m
AM Peak Period					
DHL EMA	2hrs 40m - 4hrs 30m	2hrs 20m - 3hs 30m	2hrs 40m - 4hrs	2hrs 20m - 4hrs	3hrs 10m - 4hrs 10m
Manston	1hr 50 - 3hrs 30m	1hr 25m - 2hrs 10m	1hr - 1hr 25m	2hr - 3hrs 50m	1 hr 40 - 2hrs 40m
Stansted	1hr 15m - 2hrs 30m	35m - 45m	45m - 55m	1hr 10m - 1hr 50m	1hr 20m - 2hrs

Source: Google Maps

This analysis, and the GIS drive time contour mapping provided separately at Appendix ND.1.8 in TR020002/D3/FWQ/Appendices indicate clearly that Manston is better located geographically than East Midlands relative to key Central London and the M25 corridor markets for air freight deliveries. Trucking times only become comparable to the

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		North of London at Watford. From all points South of Watford, Manston has a distinct travel time and therefore cost advantage for onward transhipments or inbound consignments. Travel times to all locations from Stansted are shorter. However, Stansted does not operate a dedicated freight facility that will allow for rapid turnaround. Taking account of travel times and turnaround at the airport, total elapsed time at Stansted Airport will be greater than at Manston.
ND.1.9	Azimuth Associates	Paragraph 1.2.1 of [APP-085] states that the only cargo hubs in the UK are East Midlands and Stansted Airports, both of which focus on the integrator model, and that the UK needs a new hub for dedicated freighters. **i. What is the difference between the integrator model and a hub for dedicated freighters?** **ii. Do integrators currently offer rapid turnarounds and specialist security clearing?**
		Applicant's Response: i. Integrators are companies that offer vertically integrated, door-to-door transport, performing their own pick-up and delivery services and operating their own fleet of aircraft and trucks, for example, FedEx, UPS, TNT, The diagram shows the difference between an integrator and a freight forwarder: The diagram also shows the role of the airport.

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		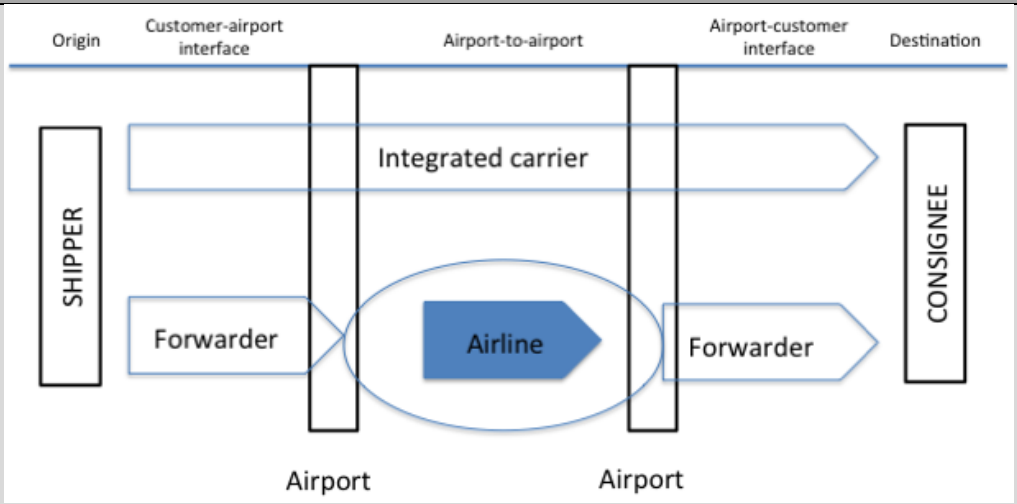 Integrators tend to dominate the airports they are based at. A specialist dedicated freighter operation does not involve transhipment between aircraft in the same way as an integrator model does, but provides a focal point for a major cargo airline's network and a base for its fleet. This is not currently offered at any UK airport. A good example overseas is Luxair at Luxembourg Airport and ASL at Liege Airport. With the integrator model, the integrator owns the aircraft and carries out all operations between road and aircraft. With the dedicated freighter operation, the airport takes the goods off the plane and puts them into a warehouse, and the transfer from warehouse to road is carried out by a range of haulage companies. ii. Integrators are not 'offering' turnarounds to customers, it is all part of their own vertically integrated operation and their driver is efficiency.

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		As a dedicated freighter operation, Manston would offer as swift turnaround for cargo flights by maintaining a focus on this market, unimpeded by significant numbers of passenger flights. Bellyhold is generally slower than both of these models. Delays are possible and the research conducted on behalf of the Applicant shows that delays are prevalent at UK airports. Staff often prioritise handling passenger airlines, particularly low cost carriers whose business model requires fast turnarounds. Manston Airport would ensure swift turnarounds for cargo flights by maintaining a focus on this market whilst allowing a relatively small passenger operation to grow.
ND.1.10	Azimuth Associates	Table 1 of the Azimuth Report [APP-085] relates to capacity proportions used by airports. The ExA notes that, in this respect, the table relates to the higher of terminal or runway capacity. **i. Is there a separate or an expanded table showing capacity proportions for both terminal and runway capacity?** **ii. If the capacity proportions in the table refers to terminal capacity do you agree that it is easier to extend or increase terminal capacity than to provide a new runway?**
		Applicant's Response: i. No. This table was reproduced from the Department for Transport's work in 2017. It shows the higher of terminal or runway capacity. ii. Each airport would have a different level of "ease" to extend or increase terminal capacity and provide a new runway. Neither option has proved easy in the UK with little additional terminal or runway capacity having been added to the national infrastructure in many decades. The re-opening of Manston Airport is therefore vital to increase UK airport capacity since all other options including the government's preferred option of a third runway at Heathrow will take some years to complete.

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ND.1.11	Azimuth Associates	Paragraph 3.3.2 of [APP-085] reports on trade levels between Manchester Airport and China, due to the introduction of a new route between MAN and China. However, this appears to be a passenger route, for which bellyhold freight would provide a welcome addition to a route's sustainability **To what extent do you consider there to be a difference between passenger flights and their associated bellyhold freight, and pure freighters in terms of the viability of a route?**
		Applicant's Response: There is a significant difference between the way that passenger and freight routes are developed. Passenger timetables are developed months in advance, whereas freighter flights are much more flexible and tend to be scheduled on a more ad hoc basis, more akin to business aviation for passengers. Viability of a freight route cannot be calculated in the same way as a passenger route, where belly freight is an 'add on' However, on some 'thick' routes where demand is high, for example between London and parts of the US, prices can be considerably higher, making pure freighter options more attractive. Pure freighters are also preferred for outsized cargo such as equipment for gas and oil rigs etc. or specialist, such as refrigerated or hazardous cargo, and for routes where there is insufficient connectivity through passenger airlines ('thin' routes). Assessing viability is therefore complex and requires understanding of particular types of freight, of pricing on thick routes and of gaps in connectivity. Growth in geographic markets for freight include China, India and other expanding economies where passenger routes may not offer sufficient bellyhold freight capacity. The growth in ecommerce has also increased the viability of routes as demonstrated by Amazon's acquisition of a fleet of pure freighters. For example, in terms of the passenger connection from Manchester, which has doubled the goods exported from the airport since the route commenced, this is a strong indication that trade and the associated air freight is viable between the UK and China. Providing connections stimulates trade. Frankfurt Airport reports that providing more pure freighter services had a

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		considerable impact on trade with China as described in their Monthly Traffic Results Frankfurt Airport with Annual Report for December 2018 The rapid growth in the number of planned airports in China (216 by 2035) indicates that trade will increase substantially. China's new airports are unlikely to be able to sustain passenger routes from the UK to all destinations. As such, belly freight is unlikely to be able to support all growth in trade and dedicated freighters, who can 'hop' between airports and are not subject to timetabling in the same way as passenger routes that need to be fixed well in advance of operation.
ND.1.12	Azimuth Associates	Paragraph 4.01 of [APP-085] refers to certain key routes which may be affected if trade routes to Heathrow are reaching capacity. Such routes utilise belly hold freight. **Provide evidence that demand exists for pure freighters to such routes.**
		Applicant's Response: The routes mentioned in 4.01 of APP-085 Volume I are Shanghai, Delhi, Mumbai, Los Angeles, Tokyo Haneda and Dubai. These routes are considered key trade routes as shown below and were discussed in relation to Heathrow Airport's Heathrow Airport warning that the UK's exporters could be held back by a lack of access to markets. • China is one of the UK's largest trading partners of UK exports (8th) and imports (4th) • India ranks 14th in terms of imports and 24th for exports (some £5.7 billion) • The USA is the UK's largest market for exports and second largest for imports • Japan ranks 12th for imports and 11th for exports • Middle East and the UAE in particular are key export markets amounting to £9.8 in 2017 Demand for air freight capacity on trunk routes between Europe – Asia – North America varies across the year with the busiest period being between October and early February (see TAC Index graph below); at these times, the price of bellyhold

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		capacity of aircraft flying the busiest trade routes will rise as demand exceeds supply up to a point where the use of freighters from nearby airports becomes commercially viable as an alternative.  The figure above shows price fluctuations to demonstrate this.

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		The flexibility of freighter operations (they are not tied slots on scheduled passenger routings) means that they can respond to such demand capacity imbalances using reliever airports in the same airport system where slots are not available at the congested primary airport. This is a key role envisaged for Manston. Heathrow has about 100 long haul routes, but slots constraints mean that freight heading to destinations outwith that network, typically will look to (a) use bellyhold capacity from other airports offering a wider/different range of destinations (e.g. Amsterdam, Frankfurt or Charles De Gaulle), or (b) integrator or chartered freighter aircraft that can provide the direct flights to these alternative or 'thin routes'.
ND.1.13	Azimuth Associates	Paragraph 4.14 of [APP-085] states, in relation to declining cargo air traffic movements at Stansted that this is perhaps an indication of the capacity constraints at Stansted impacting on cargo-only operations **Provide further evidence for this assertion.**
		Applicant's Response: Airports almost invariably prioritise passenger business over freight. The major issue for full freighter operations is the difficulty to fly according to a fixed schedule and this creates issues for airports who could allocate their available slots to more stable revenue generating passenger services. Airports servicing Low Cost Carriers (as most are) are accustomed to a business model where aircraft are turned around as quickly as possible. Freight aircraft that may require a stand for quite some hours disrupt this model. As Schiphol Airport says: "The nature of the air cargo industry is – compared to the passenger industry-based on different needs, for example as the launch of new high-tech products, flower seasons and the recent rise and seasonality of e-commerce, and unlike the passenger market -which is a highly regular market dominated by return flights- cargo carriers connect cargo flows, which are one-way flights."

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		Paragraph 4.1.4 of APP-085 Volume I provides cargo ATM statistics for the year to 2017. These figures show a decrease of 10% in freighter ATMs over the period. More recent figures show a decrease of 6.7% over the 11 months to November 2018. Freight capacity cannot be assessed separately from passenger capacity and Stansted Airport increased their passenger ATMs by 7% between January and November 2018. Since demand for freight only operations has increased for example at Frankfurt, where the percentage of freight carried in dedicated freighters rose to 63% in 2018 compared to bellyhold (measured in metric tons (see attached appendix from Fraport, page 7)). In the UK, the figure is around 30% freighter and 70% carried as bellyhold. (Budd, L. and Ison, S. (2017), The role of dedicated freighter aircraft in the provision of global airfreight services. Journal of Air Transport Management, vol. 61, pp. 34–40.) This is against a background of growth in air freight generally. Government figures show that globally, air freight grew more than twice as fast as overall global trade during 2017 (Aviation 2050: The future of UK aviation, 1.19) the widest margin of outperformance since 2010 and that UK handled record quantities of freight. IATA figures show that in Europe Freight Tonne Kilometres grew by 11.8% and 9.3% globally. However, the 2018 Steer Report (appended at Appendix ND.1.13 in TR020002/D3/FWQ/Appendices) shows that UK air freight has not grown as quickly as other EU countries such as Germany, Spain and Italy. This is a clear indication of either 1) stagnation in the UK's economy () (note that the IMF forecasts released 21st January show the Eurozone at 1.8% for 2018 and the UK at 1.4%) or 2) that there is a problem with the UK's airport infrastructure, particularly in its ability to provide sufficient capacity to meet demand. The volume of freight trucked to and from European airports (as detailed in APP-085 Volume I section 6.4) provides further evidence that capacity constraints in the UK (which include airport freight handling facilities, warehousing, etc.) including Stansted Airport, are impacting cargo-only operations.
ND.1.14	Azimuth Associates	Paragraph 4.28 of [APP-085] states in relation to the DfT's freight forecasts that the zero percent growth may be pragmatic due to the lack of capacity for dedicated freighters, particularly in the South East. **Provide evidence for the assertion.**

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		The DfT has made it clear that its assumption of 0% growth in air freighter movements is not a forecast. Indeed, the DfT does not forecast air freighter movements. Government figures do show that globally, air freight grew more than twice as fast as overall global trade during 2017 and that the UK handled record quantities of freight. In order to clarify the DfT's position on their zero percent assumption, the Applicant contacted the Department's Aviation Policy team. The letter on behalf of the Applicant and the DfT's response are at Appendix ND.1.14 in TR020002/D3/FWQ/Appendices. Specifically, the Applicant's letter concludes that: "*a zero percentage growth forecast for dedicated freighter aircraft to and from the UK is unrealistic. It may be that Government forecasters have modelled very limited freighter access to UK airports whilst the market continues to be constrained and this pragmatism accounts for the zero growth forecast. However, this figure is misleading for those planning future capacity needs. A full picture of the demand for dedicated freighter movements is required urgently so that airlines, airports and other agencies can make appropriate decisions for the economic wellbeing of the UK*." The DfT has not refuted that their assumption may be pragmatic and the Applicant awaits a UK forecast for dedicated freighters, which should be in line with Industry forecasts that show considerable projected growth. In terms of actual figures, air cargo traffic grew 10.1%, in 2017, more than double the long-term average growth rate of 4.2%. 2018 figures are still being finalised.
ND.1.15	Azimuth Associates	Table 6 of [APP-085] details freight flights at European Airports. East Midlands Airport is located at number 5 on this list. **Do you have any evidence relating to further capacity at this airport to cope with extra demand for dedicated freighters?**
		Applicant's Response:

Ref No.	Respondent	Question
		There are no outstanding planning applications for East Midlands Airport as far as the Applicant is aware. The last application was an airport logistics centre for UPS in February 2018. This will not increase the capacity for ATMs at the airport, and will increase cargo handling capacity for an integrator rather than for dedicated freighters. The description of the development was: "Erection of airport gateway logistics centre including parcel sortation and delivery building (Use Class B8) and associated complexes (including security entrance / exit, welfare, plant and control room building, welfare and office building, maintenance and office building, sprinkler tanks and pump house and disposal room); erection of standalone 2-storey office building (Use Class B1(a)); and provision of other supporting facilities including an entrance guard hut, an external vehicle staging area and employee car park - Land At Cargo East North Of Beverley Road East Midlands Airport Castle Donington Derby DE74 2SA" Additionally, the 2015 East Midlands Airport Masterplan identifies the parcel of land for aircraft aprons and cargo and cargo terminals within the area known as Cargo East Zone. It is also possible that additional car parking facilities will need to be provided although this is not likely in the near future. Approved cargo capacity at East Midlands Airport is 700,000 tones and the airport's recent draft masterplan signals that it ultimately aspires to be able to handle 1,000,000 tonnes, although this will need further planning approvals. The Manston Airport proposals have taken this prospective growth at East Midlands Airport into account in its forecasts..
ND.1.16	Azimuth Associates	The ExA note that integrators often use night flights, thereby allowing late pick up in the late afternoon/early evening by integrators, loading onto planes that night that then travel to airports overnight and cargo can be delivered the next morning. **Do you agree with this assertion, and if so does this model conflict with the night flight quotas proposed by the scheme?**
		Applicant's Response:

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		Integrators do often use night flights although airports are under increasing pressure not to operate between 23.00 and 06.00. One of the reasons for this is that daytime capacity is taken up with passenger flights, which will not be the case at Manston, where a 'slot' system will not operate. Furthermore, the Manston proposition is for dedicated freighter operations and not for an integrator to be based there. .The Applicant's Business Model (Appendix F.1.5 in TR0200002/D3/FWQ/Appendices) takes account of the night flight restrictions at Manston.
ND.1.17	Azimuth Associates	Paragraph 4.48 [APP-805] states that around half the goods that could be transported between Heathrow and continental Europe as air freight are already trucked by road. Air freight is commonly seen as good for urgent high value low weight items, due to its cost implications. **What proportion of freight trucked by road would be suited to high value, low weight model?**
		Applicant's Response: Paragraph 4.4.8 of APP-085 refers to DfT figures (The Air Freight End-to-End Journey: An analysis of the end-to-end journey of air freight through UK international gateways, 2009. It is not possible to provide an accurate account of the loads currently trucked by road. Department for the Environment data shows that the UK imports half of all the food consumed based on 2017 figures. 30% of this is from the EU with 20% from outside the EU area particularly Africa, North and South America, and Asia. By far the largest group is fruit and vegetables, which account for £11.1 billion in imports. Meat accounts for £6.7 billion, dairy and eggs £3.2 billion and fish also £3.2 billion. Whilst there is no accurate means by which to adjust a Sterling value to a tonnage, and take into account those products already transported by air, it is clear that the proportion of freight trucked by road that included high value, low weight and/or time sensitive items is considerable.

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		The Port of Dover handled 1.6 million trucks in 2017 (2018 figures not yet available). Eurotunnel handled 1.7 million trucks and some 22 million tonnes of freight in 2018. If the 22 million tonnes figure is applied to the Port of Dover crossings, an estimate of around 44 million tonnes of freight is carried across the Channel every year on trucks. There is some evidence from past delays at the Channel Crossings. For example, the Freight Transport Association estimates the cost of Operation Stack on the M20 to road haulage firms was around £700,000 a day. This includes delays to drivers as well as the loss of perishable cargo or the failure to make just-in-time delivery slots.
ND.1.18	Azimuth Associates	Section 5.1 of [App-805] details constraints at Stansted due to planning conditions and competition with passenger operations. **i. Is it the case that the freight operations at Stansted operate primarily at night when the low cost carriers are not generally in operation?** **ii. Provide more evidence over capacity constraints at Stansted.**
		Applicant's Response: i. Yes, it is our understanding that a significant proportion of Stansted's freight flights are at night, whereas low-cost carriers operate mainly during the day. There is seasonal variability to this pattern. During the summer period, daytime operations are dominated by passenger flights and freight flights are more commonly at night. During the winter period, when there are fewer daytime passenger flights, the number of freight movements in the day significantly increases. This suggests that freight operators will use daytime slots when they are available. Stansted Airport is a 24-hour operation with restrictions on the numbers and types or aircraft that are allowed to operate between the hours of 23:30-06:00. The Stansted Airport summer night movement limit is 7,000 and the noise quota limit is 4,650. The winter night movement limit is 5.000 with the noise quota limit at 3,310.

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		Whilst there are some passenger movements at night, the majority are freighter operations. Data for winter 2014 and summer 2015 shows that the total night-time ATMs at Stansted during the five winter months, November to March, were 3,321 with 7,023 in the seven summer months, April to October. Therefore, as a monthly average, there were 51% more night-time movements during the summer than during the winter. In terms of passenger operations, there were 30% more movements overall in the summer than in the winter. The reason is that the summer months have more charter flights, and aircraft may be making four rotations instead of three to more mid haul summer sun destinations (such as North Africa, Canary Islands, Turkey, and Greece) involving longer sectors. This requires longer operational hours to complete rotations. Whilst there is spare capacity for movements both during at some times during the day and during the night at Stansted, 2018 tonnage figures indicate the more congested environment for freight may already be impacting operations. The winter and summer figures shown above suggests that summer passenger schedules encourage night cargo operations. It is for this reason the Applicant's analysis shows that Stansted Airport is closer to capacity than annual figures suggest and that, with increasing passenger numbers, constraints are likely to increase over the next few years. ii. The following graph shows the utilisation of Stansted's runway (source: Airports Coordination Ltd, Stansted seasonal reports). The airport is at capacity at 07.00 and nearing capacity at several other times during the day.

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		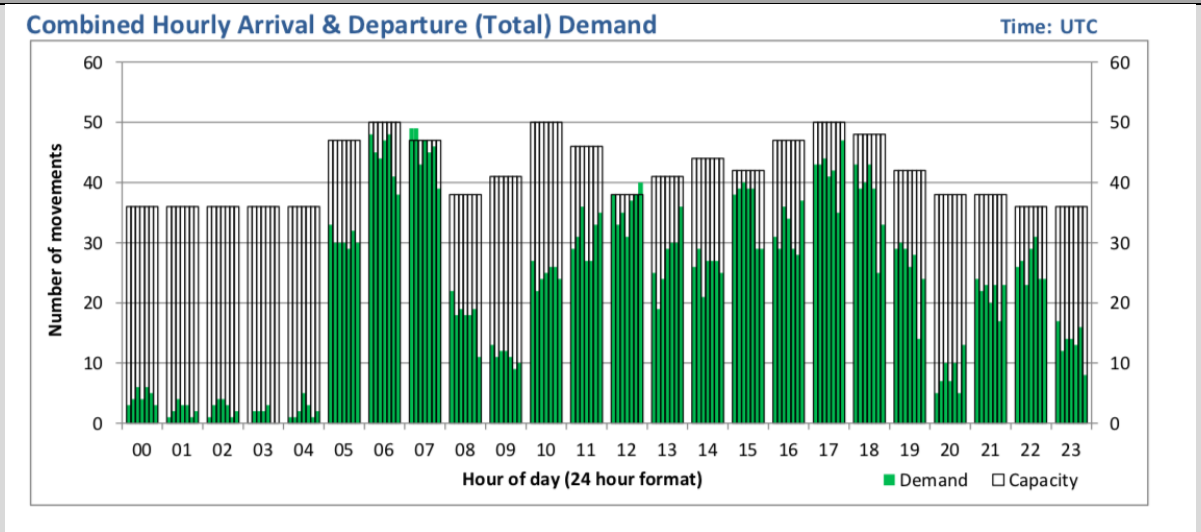 There are a number of constraints on capacity. These include the physical capacity of the runway and the ability of the associated infrastructure to accommodate the throughput from the aircraft, whether that be in terms of passenger or freight e.g. terminal buildings, speed of processing, warehousing, Stansted Airport has a planning condition that limits the number of ATMs it can handle. Stansted Airport expects to reach its cap of 35 million passengers per year within five years. Government figures show the airport to be at or near capacity by around 2030. However, airports reach the limits of their peak time capacity long before they are at capacity for their entire hours of operation. The airport will also have to decide how to allocate scare space – whether to allocate to passenger services or to increasing freight handling and warehousing. Stansted handled 237,000 tonnes of freight in 2017. Cargo movements were down 6.4% between 2017 and 2018 whilst passenger aircraft movements increased by 7.2% over the same period. This is a clear indication of the airport's strategic

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		choice of passengers over freight. This is also evidenced by the airport's own statements, detailed in APP-805 Volume I, section 5.1. These indicate that growth will be met within the airport's current cap on the number of aircraft movements. The situation at Stansted is not unique for airports experiencing capacity constraints. The European Shippers' Council point to the battle for landing slots at constrained airports between the Low Cost Carriers and all cargo operators. They say this, "*will be central to the global debate over airport capacity of the next decade*" (see APP-805 Volume I, paragraph 5.1.6). Cargo flight timings are likely to be impacted severely at Stansted since the airport will most likely prioritise servicing their low cost carriers, particularly the dominant carrier, Ryanair. This is because the proportion of the airport's income derived from Ryanair is considerable. This focus on service quality of the LCCs, coupled with the high usage of the single runway is likely to result in all-cargo flights waiting to land or take off, causing a knock-on effect to their schedules and hampering their operations. LCCs and Ryanair in particular will, given slot availability, switch services to a competing London airport in the event of regular service issues. By contrast, cargo services are much more difficult to relocate as handling facilities such as warehousing may not be available at competing airports. An airport's preference for passenger flights over freight was demonstrated at Amsterdam's Schiphol Airport, where air traffic capacity constraints were announced in September 2017 (see APP-805 Volume I, section 8.4). As with Stansted, Schiphol Airport has an annual quota restricting its operation. The 2020 maximum was set at 510,000 movements. However, ATMs at Schiphol increased rapidly and in September 2017 it was announced that air traffic capacity constraints would be introduced for the forthcoming winter season. These constraints meant that slots were de-allocated to airlines that have failed to use less than 80% of their requested flight schedules. Since air freight is less predictable than passenger transport, it is likely that freighter airlines would be most affected. The first half of 2017 showed a cargo volume growth of 8.7% at Schiphol compared to the previous year However, the introduction of restrictions resulted in a reduction in full freighter movements of 12.4% in November 2017. In 2018, the airport saw full freighter movements decrease by 10.4% during the year to 15,942 as slot restrictions resulted in all-cargo carriers utilising nearby alternatives.
ND.1.19		Section 5.2 of [APP-805] concerns Heathrow and notes the proposed 3rd runway.

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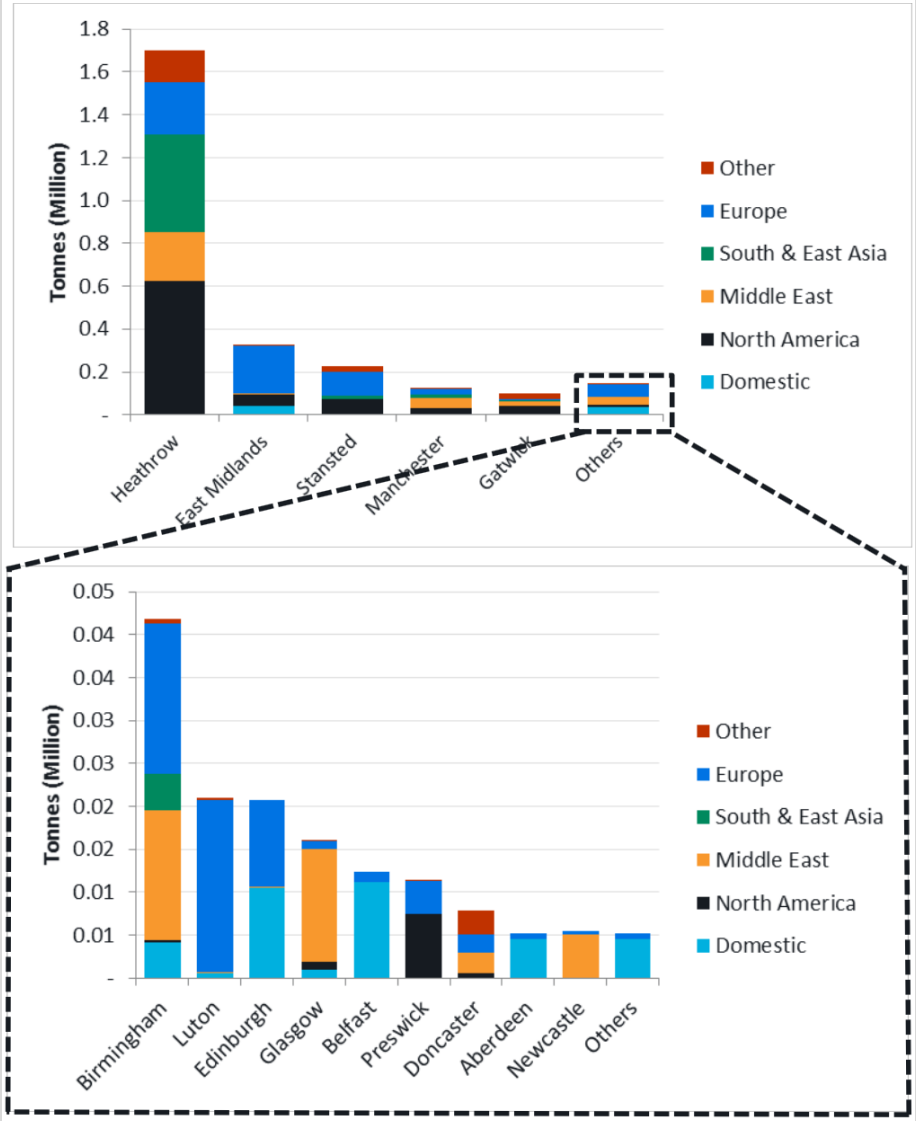
	Azimuth Associates	**i. Do you consider that the 3rd runway would be likely to cater for in the main (a) low cost carriers or (b) more 'traditional' airlines?** **ii. If (b) would bellyhold capacity increase substantially?**
		Applicant's Response: i. At this stage it is difficult to be sure what the balance between (a) low cost and (b) more traditional airlines using Runway 3 will be. Heathrow currently attracts relatively few recognised low cost carriers, partly because of long-standing slot shortages, but mostly because of airport charges that are higher than other London airports. Although low cost airlines like easyJet are known to be looking at networks from Heathrow when R3 capacity is released, the extent of them will depend on future pricing and local slot rules which have not yet been finalised. On balance, the Applicant envisages that network carriers will acquire more new runway slots than low cost carriers especially as at least a third of the slots will be used for long haul services, but the relative proportion will be higher than the position on the existing two runways at Heathrow today. Examining this proposition in more detail, the third runway at Heathrow is projected to create 260,000 ATMs/pa of new slots. Although the allocation of new slots is in the hand of independent slot co-ordinator Airport Coordination Ltd, for airport planning purposes, when developing its infrastructure plans Heathrow works on the basis that to maintain an effective hub operation with circa 30% interlining traffic (as presently), for every one new long-haul ATM there should be 2 short haul or domestic ATMs. This suggests around 85,000 new long-haul ATMs and 175,000 new short haul ATMs; since the Government has indicated in the Airport NPS that 15% of the additional ATMs will be allocated to additional regional domestic services at least 40,000 of the short haul ATMs are likely to be domestic, the remainder (135,000 ATMs) being international services to Band A destinations in Europe and North Africa). ii. As the graphic below, which is taken from a recent study undertaken for Airlines UK (Oct 2018) indicates, the great majority of bellyhold freight carried to and from Heathrow is on long haul services.

Figure 3.3: Destination[3] of UK freight volumes, Million Tonnes (2017)



Source: CAA

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		The Applicant sees no reason why this pattern should change as: (a) freight is recognised as being a material contributor towards route profitability for larger long haul aircraft but at best makes only a marginal difference to revenues on short haul aircraft where payloads are typically much smaller; (b) in a congested operating environment such as Heathrow short haul carriers, with tight turn round times to achieve 3 or 4 rotations per day from their aircraft, tend to eschew freight as an added complexity threatening operational reliability; and (c) since increasing competition was one of the strategic justifications for supporting new capacity at Heathrow, and Flybe and easyJet have both expressed interest in operating from the airport when they can secure a critical mass of slots, it is a reasonable to assume (especially with the 'New Entrant' slot rule), that a significant proportion of new short haul slots will go to Low Costs Carriers who have even less interest in carrying bellyhold freight than their network equivalents. In terms of new long haul operations, although 'Long Haul' Low Cost Carriers are heavily concentrated at Gatwick currently, it is likely some will seek to gravitate or replicate those services to Heathrow as third runway slots become available; and although for these airlines freight is not as important a component of their business model as it is for network carriers, many do carry freight and are therefore likely to help to maintain Heathrow's long haul bellyhold dominance in terms of freight markets served. Heathrow's proposals to Government include a commitment to provide a freight capability at the airport of up to 3 million tonnes (MT). Based on the current aircraft mix at Heathrow, each long haul aircraft is carrying approximately ten tonnes per ATM; the addition of 85,000 new long-haul ATMs should therefore bring at least a further 850,000 additional tonnes of freight, taking Heathrow throughput prospectively to 2.6MT (1.75m existing + 0.85m) assuming existing levels of freighter use continue or 2.5MT if these are relocated elsewhere. It will only take a small increase of circa 2 tonnes per long haul aircraft to fill the remaining 0.5MT of freight capacity projected for Heathrow post Runway 3. Although there are contradictory views on how bellyhold freight 'friendly' the new long haul aircraft types that are expected to form part of significant part Heathrow's future fleet mix (i.e. B787, B777, A350) are likely to be, over a period of 20 years it is reasonable to expect a small incremental increase in the average carrying per aircraft to take up the remaining freight capacity at the airport. In the long term, however,

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		the Applicant believes that the capacity constraints that face Heathrow today will re-emerge and that the freight industry will need spare freight handling capacity elsewhere in the South East of England or across the English Channel.
ND.1.20	Azimuth Associates	The Government's final consultation on the new Aviation Strategy, 'Aviation 2050 The future of UK aviation' (December 2018) states that it has been estimated that the proposed 3rd runway at Heathrow will nearly double the capacity for freight at the airport to 3 million tonnes a year [para 4.49] **i. How would this impact the proposed scheme at Manston?** **ii. In what ways do your views on the effects of the proposed third runway at Heathrow differ from the Government, and why?**
		Applicant's Response: i. The forecasts that underpin the Applicant's proposals take into account that the Airports NPS supports a new runway at Heathrow and the estimates that Heathrow Airport Ltd (HAL) have made that this could result in handing capacity there rising to 3MT pa. The role of Manston which will focus on freighters rather than bellyhold, is complementary to Heathrow. ii. Neither the Airports Commission nor the Government have undertaken any kind of in-depth independent review of HAL's proposals for increasing cargo capacity (i.e. would they deliver the 3.0MT of capacity projected and would there be sufficient incremental demand as a by-product of the Runway 3 project to use all of that new capacity). While at this stage the Applicant sees no reason to depart from this agreed understanding (the definitive position will be explored in more depth during the Runway 3 DCO process), it does note that achieving this figure is dependent on (a) the redevelopment of Terminal 4 to free up space for additional cargo stands and handling facilities within the airport's operational boundaries, and (b) the release of all the additional runway slots that Runway 3 will provide, and the Applicant believes that will not happen on Day 1 of the opening of the runway in 2027, but progressively over a period of ten years or more.

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		It is also important to highlight that the putative future capacity figure of 3MT at Heathrow is not a function of air transport movements as the Government's somewhat limited discussion of the issue in the NPS and latest Aviation Strategy consultation document imply, but rather of a number of key variables which our market assessment considered in detail and those of Avia Solutions and York Aviation did not. These include: (i) the physical capacity of the airfield at Heathrow to accommodate additional stands and cargo handling space; (ii) the seasonal and route based variability of the balance between the demand and capacity for freight carryings from Heathrow; (iii) the assumption that bellyhold will continue to dominate Heathrow's offer to the air freight market (i.e. there will be little or no increase in freighter movements from the 1,690 ATMs recorded in 2017 – when in reality it is more likely there will be a decline); (iv) the likelihood that the proportion of long-haul vs short haul flights will not materially change from the current broad 2:1 ratio; and (v) the mix of long-haul aircraft types operating from Heathrow moving forward does not result in a step-change (up or down) in the average bellyhold capacity available per aircraft. Translating the above into a high-level overview, the projected incremental gain in freight capacity at Heathrow from Runway 3 is 1.3MT, and whilst this is consistent with 2017 average loads per aircraft, and therefore a reasonable working assumption, its full realisation is by no means certain and also potentially 20 years away. In the Applicant's view, therefore, the scale and timing of the forecast increase in freight capacity at Heathrow as a result of Runway 3, is neither so large, so certain or so timely, as to accommodate all of the substantial unserved demand the Applicant forecasts from London and the South East and other parts of the UK, over the next 30 years (i.e. by 2050). Rather, the Applicant believes, that there is a material and complementary market niche that Manston is ideally positioned to fill. Even on a very conservative Compound Annual Growth Rate assumption for UK air freight of 2.0% (less than 50% of the 4.2% rate both Boeing and Airbus project for actual global average growth out to 2037 in their most recent forecasts) by 2050 the Applicant estimates 400,000 tonnes of additional freight handling capacity will be needed in the South East and

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		there are no other airports that will be available to provide this kind of volume as a result of a combination of space shortages and slot and noise constraints.
ND.1.21	Azimuth Associates	Gatwick as a centre for freight is dismissed [section 5.3, APP-805] due to a lack of experience in freight operations. **What is the direct experience of the Applicant in freight operations?**
		Applicant's Response: There is a misunderstanding here of the statement made in section 5.3, APP-085. There is a difference between belly cargo carried in the holds of passenger aircraft and air freight carried in dedicated freighter aircraft. Gatwick handled 97,000 tonnes of cargo in 2017 almost all of which was carried in the bellies of passenger aircraft and of which only an estimated 2,000 tonnes was carried in dedicated freighters. The reference in the Azimuth Report [APP-085] was to the fact that Gatwick has little experience in the specialised field of freighter operations. Members of the Applicant's team do have extensive experience in relation to the management and operation of freighter cargo, as opposed to belly cargo. In particular, the principal of Viscount Aviation was responsible for managing cargo operations at Prestwick Airport prior to the disposal to the Scottish Government, and for Infratil at Manston Airport prior to the sale of the site to Lothian Shelf (718) Limited in 2013. Please see attached capability statements for Viscount Aviation, RPS and Northpoint Aviation at Appendix CA.1.14 in TR020002/D3/FWQ/Appendices.
ND.1.22	Azimuth Associates	Section 5.7 of [APP-805] concerns East Midlands Airport (EMA), and notes road congestion hampering surface access to the south east. **i. Given the assertions regarding surface access congestion, why do you consider that EMA is the UK hub for DHL and UPS?**

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		ii. How does capacity and road congestion on the M1 compare with that experienced on the A299 and M2/A2?
		Applicant's Response: i. East Midlands Airport (EMA) is currently the UK hub for DHL and UPS because it is in a central location within the UK that serves a large part of the country outside London and the south-east. It is also de-facto a reflection of: - the significant volumes of air freight they both move from, and tranship at, East Midlands on an annual basis: - the feeder flights to and from EMA both operate on a nightly basis; - their physical presence (i.e. the scale of their handling facilities) compared with their much smaller scale operations at other UK airports (including Heathrow); and - the position EMA fulfils in both of their corporate networks in Europe. The Applicant's comments on surface access links from/to EMA is a reflection of detailed GIS based travel time contour mapping using Arc-Info, and the representative destination analysis using Google Maps provided in the table in the response to Question ND.1.8. Both approaches examine free-flow truck times (average 55mph) alongside assumptions about the slower journey times likely in peak periods, especially when highly congested stretches of the motorway network (such as the M1 and M25) and central London are part of the core routings. There is also currently on-going road maintenance and upgrades of key parts of the trunk road network used by DHL and UPS trucks that introduce journey time delays and unreliability that their delivery times must take into account. As a result, the Applicant considers its view to be data driven and properly evidenced. ii. The M1 is dual three lane, in parts dual four lane, motorway between the M25 and EMA; the A2/M2 is similarly configured for 15 miles from the M25 but reduces to two lanes after J4, and then to dualled A-Road at Brenley Corner all the way to the airport. That being said, the A299 and M2/A2 are subject to much lower levels of network stress than the M1, save in the vicinity of their intersection with the M25 near the Dartford Crossing which is subject to regular episodes of congestion. This means that maximum speeds for trucks along both corridors are similar, but journey times are likely to be much more reliable on the A2/M2 and A299 route that on the M1, especially during peak periods.

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ND.1.23	Azimuth Associates	Section 6.2.4 of APP-805 concerns Brexit, and states that friction at borders is likely to increase to meet security demands and payment of tariffs, suggesting this could promote a switch from trucking freight to air. **i. What would be the effect of increased friction at customs entry points and possible higher tariffs on air freight?** **ii. How would this differ from road freight?**
		Applicant's Response: i. Since a large proportion of air freight is flown outside of the UK, air freight is already accustomed to complying with all necessary checks and paperwork. Any increase in air freight between European countries would be likely to fit into the current system, provided capacity is made available, without additional friction. ii. Road freight is generally destined to or from European destinations and therefore has been accustomed to frictionless border crossings at UK frontiers. The Port of Dover handled 2.6 million passengers in 2017 (2018 figures pending). This is a pinch point that is well recognised by government and local authorities and is likely to result in long queues of trucks affecting potentially the whole of Kent. The Port of Calais has identified an area for its Border Inspection Post but has made no progress towards construction. Calais is already congested with trucks frequently delayed. Any additional checks would create lengthy queues on both the French and UK side.
ND.1.24	Azimuth Associates	Section 6.2.6 envisages a situation where an airport may have to security check all visitors as they enter an airport, as opposed to at the landside/airside border (Further questions on design can also be found within the Landscape questions). **i. Where has such an arrangement be suggested, and do you consider it to be realistic?**

Ref No.	Respondent	Question
		ii. How would increased delays for passengers impact on freight?
		Applicant's Response: i. Entry to many large public buildings is now subject to security searches prior to entry. It is therefore not unrealistic to consider that airports, whose terminals can hold many thousand passengers, may be subject to security checks for all visitors. Adjustment to the layout of the terminal building would be made if this becomes a requirement. ii. Any delays to passengers passing through airports may impact on the timely departure of passenger flights. Delays to passenger flights delay the bellyhold freight carried by that aircraft, but would not delay freight-only flights. This could have a positive effect on Manston where the majority of flights will be freight-only.
ND.1.25	Azimuth Associates	Section 6.3 of [APP-805] concerns bellyhold and dedicated freight and notes that bellyhold freight may go through a number of different airports. Paragraph 6.3.2 notes that dedicated freighters hop from airport to airport. **Elaborate on how these two situations are different and what are the benefits of pure freighters over bellyhold in this scenario.**
		Applicant's Response: If cargo is being transported by bellyhold from A to B, and there is no direct passenger service, it will have to travel between more airports following the existing passenger routes. Freighters, on the other hand, when flying, say, from A to C, could stop at B on the way to drop off cargo (i.e. hopping via B) since they are not adhering to a passenger timetable. This flexibility is one of the key advantages of freighter aircraft and relieves a key pressure on airports where slots are scarce. Fuller details of the difference between bellyhold and pure freighters is included in APP-085 Volume I section 6.3.

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		Belly freight is cargo stowed under the main deck of a passenger aircraft. This means that cargo is restricted to passenger schedules and destinations, which may not serve cargo markets. Since on and off loading cargo can cause delays to passenger aircraft, the Low Cost Carriers, who rely on fast turnarounds, generally do not carry belly freight. Belly freight is not necessarily forwarded on single passenger flights but may take a route involving a series of airports, as Road Feeder Service schedules show. This adds air miles, additional fuel, and intermediate airport handling to overall forwarding costs and impacts. By contrast to passenger services, dedicated freighters, which carry cargo only, do not tend to operate a point-to-point, bi-directional service. Instead they 'hop' from airport to airport, picking up and setting down cargo, as demand requires. Many freight operations move between more than one of the main European freight airports as well as a number of overseas airports. Whilst some freighters do operate simple round trips, the data shows that inbound patterns do not necessarily mirror outbound patterns, providing flexibility to add new pick up/drop off points as the market dictates. Types of cargo carried by dedicated freighters include: • perishables such as flowers, fruit, vegetables, fish, seafood; • other time sensitive items such as electronic components, machinery required to ensure operation of critical services (such as for aircraft, energy generation, etc.) and increasingly consumer goods purchased online including a wide range of items such as computers, mobile phones, clothing and other fashion items; • pharmaceuticals; • heavy, outsized and hazardous items; • luxury items including cars, food and drink; • live animals such as race horses; • niche markets such as cargo for live events and entertainment (rock bands, sports, etc.); • mail; and • humanitarian aid and military use. Whilst a large proportion of air freight is currently carried as belly freight in passenger aircraft, particularly in the UK, Boeing says that:

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		"*Dedicated freighter services nonetheless offer significant advantages, including more predictable and reliable volumes and schedules, greater control over timing and routing, and a variety of services for outsize cargo, hazardous materials, and other types of cargo that cannot be accommodated in passenger airplanes. In addition, range restrictions on fully loaded passenger flights and the limited number of passenger frequencies serving high-demand cargo markets make freighters essential where both long-range and frequent service are required."* (Boeing, 2014, p. 3) The introduction of wide body passenger aircraft, which have larger belly capacity has not significantly reduced the dedicated freighter share over time (Boeing, 2016b, p. 3). Boeing's statistics show that, on some routes, freighters are critical. For example, around 80% of the air freight between Asia and Europe is carried on dedicated freighters. Boeing explains the reasons for using dedicated freighters include restricted passenger routes and range restrictions as follows: "*Over the past five years, only 30 percent of the lower-hold capacity of new widebody aircraft has served primary cargo airport routes. This underscores the need for freighters to serve these markets and airports. Range restrictions on fully loaded passenger fights and the limited number of passenger frequencies serving high-demand cargo markets make freighters essential where both long-range and frequent service are required*." (Boeing, 2016b, p. 4) IATA's Global Shippers' Surveys show that speed is the number one selling point for air cargo transport, which is linked to reliability and predictability. Indeed, speed is a key source of competitive advantage and improving time to market is now a priority for many sectors. Advantage can be gained from speed in innovation and use of analytics, product development, time to market, and delivery to and returns from the customer. For electronics firms such as mobile phone manufacturers, time-based competition means that reducing delivery times by even a few days is valuable. With the rise of e-commerce and online purchases, consumers now expect near instant satisfaction of their order. For example, Amazon Prime has made speed of delivery a priority and leveraged competitive advantage from their two-day service. With their launch of Amazon Air, a dedicated air freighter network, Amazon rejected belly freight alternatives that may not have been providing the speed and reliability required to meet customer expectations. Boeing forecasts that:

<table>
<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
<tr><td></td><td></td><td>"Freighters will continue to carry more than half of the world's air cargo for the next 20 years, as the majority of players in the industry continue to rely on and augment their cargo operations by flying freighters." (Boeing, 2016b, p. 4).

However, in the UK the DfT report the proportion of cargo in dedicated freighters as between 22% and 30% with the remaining 70% to 78%% being carried as belly freight (DfT, 2017, paras 3.32 and 4.4). The considerable disparity between global and UK patterns of air freight transport indicates an underlying issue in the UK. One potential cause is the UK's constrained air freight market, particularly in the south east of the Country. Constraints at UK airports, not just in terms of slots but also in handling infrastructure and times, resulting in airports outside the UK being used in combination with trucking. The UK does not currently have a dedicated freighter airport such as Liege or Leipzig. Stansted and East Midlands airports, handling considerable numbers of passengers and passenger ATMs, are more similar to Amsterdam's Schiphol Airport, where constraints have led to pressures on slots for freighter, with many airlines looking to move to other airports in Europe.</td></tr>
<tr><td>ND.1.26</td><td>Azimuth Associates</td><td>Section 6.3.9 of [APP-805] compares Stansted and East Midlands Airports to Schipol, where it is stated constraints have led to pressures on slots for freighters. However, Schipol is the hub airport for the Netherlands.

Compare the passenger number and freight ATMs at these respective airports, setting out the differing constraints for the three airports.

Applicant's Response:

<table>
<tr><th></th><th>Stansted</th><th>East Midlands</th><th>Schiphol</th></tr>
<tr><td>Passenger ATMs</td><td>175,599 (2018)</td><td>34,728 (2018)</td><td>483,504 (2018) *</td></tr>
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	163,738 (2017)	35,369 (2017)	478,948 (2017 *
Passenger numbers	27,996,116 (2018) 25,904,450 (2017)	4,873,831 (2018) 4,878,781 (2017)	71,053,157 (2018) 68,515,425 (2017)
Cargo ATMs	9,478 (2018) 10,126 (2017)	22,219 (2018) 21,376 (2017)	15,942 (2018) 17,795 (2017)
Cargo tonnes	226,129 (2018) 236,891 (2017)	334,535 (2018) 324,214 (2017)	1,716,982 (2018) 1,760,975 (2017)

Constraints

Stansted:

- Local Rule 4 cap raised by Uttlesford District Council to 43 million passengers per year from 35 million whilst remaining within the existing number of ATMs, which are combined airfield operations of 274,000 ATMs (of which **not more than** 16,000 would be Cargo Air Transport Movements (CATM)
- Night quota restrictions apply during period 23:30 - 06:00
- The summer night movement limit is 7,000 and the noise quota limit is 4,650. The winter night movement limit is 5.000 with the noise quota limit at 3,310.
- Single runway

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		East Midlands: When the new UPS handling facilities are brought on stream later this year (see answer to ND.1.15), existing constraints will be alleviated. Schiphol: • Cap set at 500,000 ATMs per year until 2020 of which no more than 32,000 are night movements • 185,000 available slots for Commercial Aviation; winter season 2017/2018 (October 29, 2017 to March 24, 2018) with 10,735 of these being night time arrivals and departures • Night departure slots are from 22:40 – 06:59 Local Time • Night arrival slots are from 23:00 – 07:19 LT • Coordination of runway capacity will be based on o Constraints for 20 minutes periods, and o For periods of equal ATM mode with a minimum duration of one hour – constraints on rolling o hours, i.e. each 60 minute interval that occurs within that ATM mode, with a stepsize of 20 minutes, will have a constraint on capacity. • Additional requirements: o Arrival and departure peak modes should not overlap. o Each arrival peak mode period shall be separated from a preceding departure peak mode period by o an off peak mode period. Between the first departure and arrival peak, the duration of this off peak mode period should be at least 30 minutes. The duration of this off peak mode period between any other departure and arrival peak shall be at least 20 minutes. o Each departure and arrival peak mode shall have a minimal duration of 40 minutes, except for the first peak mode at 05:00 UTC, which has a minimal duration of 20 minutes. Slots should be requested and will be allocated per 5 minutes.

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ND.1.27	The Applicant Azimuth Associates	The RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] describes the decrease in cargo air traffic movements from 2000 to 2017. **Given this evidence, how realistic are your forecasts for the Proposed Development?**
		Applicant's Response: Cargo ATMs did decrease between 2000 and 2017, but this is a very selective snapshot. The RR from Pinsent Masons LLP fails to acknowledge the increasing constraints on available capacity for freight only flights at London airports over the same period as passenger ATMs have increased substantially giving rise to daytime slot shortages, while restrictions on night-time movements at designated airports have gradually tightened. In this context, reductions in cargo ATMs can be seen not as evidence of declining demand, but of constrained capacity which a reliever airport located in the South East like Manston would help to redress. The UK Government in the December 2018 Green Paper acknowledges that demand for aviation (including freight) has grown significantly since 2010. The Government also says that it supports continued growth of the air freight sector particularly making best use of existing capacity at airports, to continue to facilitate global trade for UK businesses and consumers. The Applicant remains firmly of the view that historically the decrease in cargo ATMs is a result of capacity constraints rather than a decrease in demand and has provided substantial evidence to support this. Looking forward the global trend as represented by forecasts from acknowledged industry sources continues to indicate long term growth in freighter movements. Boeing forecasts that air freight will double over the next 20 years with growth of 4.2% annually. To meet growing market needs, Boeing also forecasts that the world freighter fleet will expand by more than 70%, from the current total of 1,870 to 3,260 airplanes. The company projects new production freighter deliveries valued at $280 billion. Demand for regional express services in fast-developing economies will boost the standard-body share of the freighter fleet from 37%

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		currently to 39%. 1,170 standard body and 500 medium wide-body passenger airplanes will be converted into freighters over the next two decades. Boeing say that: "*Dedicated freighters, which provide unique capability that passenger belly-cargo cannot match, will continue to carry more than 50 percent of the world's air cargo demand. The majority will be in the large widebody freighter category, such as the 747-8 Freighter and 777 Freighters*." At present, the UK Government does not forecast air freight, but the UK is an important part of the global industry and there is no reason to suppose that global forecasts, such as the Boeing forecast, will not apply to the UK if capacity is made available to cater for the growth in freight and freighter only flights being predicted. This is the strategically important role that Manston can play in the London and South East and cross-channel air freight markets. All of which indicates that the Applicant's forecasts for the Proposed Development are entirely realistic.
ND.1.28	The Applicant Azimuth Associates	**Given that a large proportion of existing pure freight flights take place at night, in order to provide a next day service, how realistic are the forecasts of proposed daytime cargo flights?**
		Applicant's Response: The Applicant does not accept that the reason that a large proportion of pure freight flights take place at night in order to provide a next day service. It is the integrator sector that operates primarily at night, and this is not where the focus of activity will be at Manston. The Applicant believes that if air freight operators are accommodated during the day and are unencumbered by passenger operations, that its forecasts of proposed cargo flights are entirely realistic.

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ND.1.29	TDC	The RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] states that TDC previously sought to explore whether airports operations at the site would be viable but could not find suitable partners to carry out such operations. **i. What is your view on this statement; and** **ii. has anything changed in this respect since October 2015?**
		Applicant's Response: N/A
ND.1.30	The Applicant Azimuth Associates	The RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] contains, as an appendix, a report on the Commercial Viability of Manston Airport prepared for TDC by AviaSolutions in September 2016 (the AviaSolutions Report). This concludes that airport operations at Manston "*are very unlikely to be financially viable in the longer term, and almost certainly not possible in the period to 2031*". The ExA note that AviaSolutions do not offer any opinion on the reasonableness of otherwise of your commercial plans for the airport. **i. What are your views on this report and its conclusion?** **ii. In what ways do your proposal and evidence differ from that presented by this report?** **iii. Comment on any differences identified.**
		Applicant's Response:

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		i. The Applicant considers that the report by AviaSolutions ('Avia') is fundamentally flawed. Its key failing is its inconsistency regarding demand for additional runway capacity in the South East. On the one hand, Avia point out that, "Manston is located in the South East of England, where there is a need for additional runway capacity." This is something both the Davies Commission and the UK Government agree with - in addition to offering pro-active support for making best use of existing airport infrastructure, which the Applicants proposals do). On the other hand, they draw the conclusion (p. 32) that their, "assumptions indicate that all forecast freight demand can be accommodated in all scenarios up to 2045." This means that Avia believe, contrary to Government data, that even without additional capacity at either Heathrow or Gatwick, there will be no constraints on air freight. In contrast to Avia, York Aviation's report for the FTA (see Appendix ND.17.xx) forecasts a shortfall in air freight capacity by 2050 of around 2.1 million tonnes resulting in 71% of excess freight demand being trucked outside the UK to Paris CDG, Amsterdam Schiphol and Frankfurt. And this is without York having taken full account of the emerging growth in e-commerce related demand for air freight or the prospect of night movements for freight being squeezed substantially by demand from more lucrative passenger services. Research on behalf of the Applicant confirms that a substantial volume of freight is already being trucked to and from European airports, because it is quicker than waiting for space on a flight at a UK airport, and this seems only likely to increase in the absence of dedicated new capacity to serve it within the UK. This will only be enhanced by likely delays at channel ports post Brexit which will make for an even less efficient and reliable service for UK consignees, cumulatively over time resulting in large economic dis-benefits to the UK economy. Clearly, it is not possible for both Avia Solution's and York Aviation's diametrically divergent views of demand and capacity for air freight in the South East of England to be correct; the Applicant's assessment provides a rather more balanced and realistic assessment which our forecasts and the great majority of available evidence support. ii. It should be noted that in a footnote at the bottom of page 14 of the report, Avia say, "For the avoidance of doubt, AviaSolutions therefore does not offer any opinion about the reasonableness or otherwise of RiverOak's commercial plans

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		for the airport". The degree to which the report criticises, or even addresses, the Applicant's proposals therefore appears to be limited. The Avia report contains very few interviews with stakeholders and was produced in no more than six weeks. Indeed, air freight experts were very poorly represented, even in the few interviews undertaken. Avia spoke to only four of these stakeholders: Mr. Stanley G. Wraight; an anonymous freighter Operator at Stansted; an Air Cargo Charter Broker; and an ex-Senior Executive DHL. Of these four interviews, half were positive about the potential for Manston Airport. No information was provided about how long ago the executive from DHL left the organisation or whether he was party to more recent discussions. Even so, this interviewee states that, "Manston would undoubtedly attract some business" (p. 53). The Avia report relies too heavily on the history of Manston Airport rather than considering its future potential. Stasis is its default assumption and all its analysis proceeds from this point, conveniently ignoring major structural changes in the freight market that are underway and the implications of these in an airport system where capacity is already tight and getting progressively worse. It says that, "three separate companies tried and failed to operate Manston Airport profitably" (p. 10). However, failure by other private sector organisations is not an indicator of the future performance of a different operator. If this were a factory or retail outlet, no one would insist that there was no hope for that site – ever. It is difficult to assess the quality of the data used by Avia to predict air freight demand. Much of focus of their work is on the passenger market rather than on freight, which is RiverOak's declared interest. Moreover, the report provides no dates for the data it used, including the CAA passenger survey, which all indications suggest is out of date since it does not include Southend Airport. The principle used by Avia to determine that there is no need for additional runway capacity is the belief that aircraft will carry more than they presently carry and yet there is no evidence to support how this finding was derived. There seems to be no breakdown by aircraft type, which would provide a more accurate estimate of payload (the amount of freight an aircraft can carry). Instead, the authors have taken a very broad average tonnage per ATM and their, "assumptions take average loads on freighters to 55 tonnes [at Heathrow] and 53 tonnes [at Stansted]" (p. 31) when current figures for cargo aircraft at both airports are an average of 32 and 23 tonnes respectively a factor of 1.5 to 2less than this, and the average belly hold payload from Heathrow is between 10-15 tonnes a factor of 3-5 less.

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		Air freighting is usually employed, instead of road or sea freight as a reliable transportation mode for high-value equipment, machinery and spare parts, and high value to weight items are the most likely to be air freighted (such as flowers, for example). It is unclear how the average tonnage on aircraft carrying such items could be increased so substantially without displacement or over-booking of existing cargo even were such average payloads to become possible, which we do not accept. A much more realistic outlook is for the number of ATMs carrying freight to increase materially. iii. The differences identified include. • The few interviews (only four stakeholders) carried out by Avia is in contrast to the 24 participants in the Applicant's research. • Avia use the history and old data for Manston Airport to predict the future scale of operations. This method takes no account of the Applicant's intended investment in the site, including correcting a no-compliant taxiway and providing considerable state-of-the-art warehousing and handling facilities. Extrapolating from past data misses changes in the market since the original data (prior to 2014 in the case of Manston Airport, the impact of ecommerce on the market, increasing demand from emerging economies, and the effect of improving connectivity on the local economy in terms of encouraging exporting. • Avia's use of data is undated whereas the Applicant's work takes account of the latest available data. • Avia's analysis of the UK's airport sector is that there is no need for additional runway capacity. The Applicant's work is in line with government predications that the London airport system will be almost entirely full by 2030 without expansion. • Avia's recommendation is that aircraft could simply carry more tonnes of freight. The Applicant understands that air freight is more complex and that volume is the key factor rather than weight. For example, a tonne of flowers requires more volume than would a heavy item of machinery for a wind farm. It is therefore a gross simplification to calculate available tonnage on aircraft, as Avia have done in their report.
ND.1.31	The Applicant	The AviaSolutions report notes, in relation to the view that stagnation of growth in the UK air freight air freight market since 2000 has been caused by a lack of airport capacity in the London area and specifically at Heathrow, that whilst the lack of ATM growth at Heathrow undoubtedly hampered the development of the national air freight market, it is also true that over this period

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	Azimuth Associates	there was adequate airport capacity available at both Stansted and Manston to support additional dedicated freighter movements. The report notes that freighter movements at Stansted decreased over the period, while Manston closed, suggesting that the stagnation of UK airfreight was not a consequence of capacity constraints given the excess capacity at Stansted and Manston. **What are your views on this assertion regarding demand for air freight?**
		Applicant's Response: When Manston was previously operational, it effectively had one stand for cargo aircraft and limited storage facilities, with the result that virtually all its business amounted to in-bound perishables from east Africa. The current proposals on the other hand include 19 cargo stands and associated cargo handling infrastructure. The Applicant acknowledges that since 2000 Stansted Airport has not been operating continuously at full capacity. Its priority has been to fill any surplus capacity with passenger traffic. In 2000, passenger numbers were recorded at 11.8 million and freight at 168,000 tonnes. There was a major expansion programme to the passenger terminal between 2007 and 2009. The Manchester Airport Group acquired Stansted in 2013 and immediately announced a new £80 million terminal redevelopment programme, again focussed on passengers. In 2017, passenger numbers were recorded at 26 million while freight has increased only marginally to 237,000 tonnes. (UK CAA Aircraft and passenger traffic data, 2017) Stansted handled 237,000 tonnes of freight in 2017. Cargo movements were down 6.4% between 2017 and 2018 whilst passenger aircraft movements increased by 7.2% over the same period. This is a clear indication of the airport's strategic choice of passengers over freight. This is also evidenced by the airport's own statements, detailed in APP-805 Volume I, section 5.1. These indicate that growth will be met within the airport's current cap on the number of aircraft movements. The situation at Stansted is not unique for airports experiencing capacity constraints. The European Shippers' Council point to

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		the battle for landing slots at constrained airports between the Low Cost Carriers and all cargo operators. They say this, "*will be central to the global debate over airport capacity of the next decade*" (see APP-805 Volume I, paragraph 5.1.6).
ND.1.32	The Applicant Azimuth Associates	The AviaSolutions report states that much of the previous cargo at Manston was fresh produce from Africa, and considers that the airport was popular with shippers as it was uncongested, offered good quality handling services (provided by airport staff) and the airport charges were competitive. However, it also notes that airlines/shippers nonetheless had to incur the costs of flying freight aircraft virtually empty on the return leg to their base airport (e.g. Luxembourg, Ostend and Liege) after off-loading as *"Manston was almost exclusively used for imports, and this averaged 107 tonnes per import, with virtually no export volume*." (Paras 6.2, 6.3). **i. What are your views on this assertion?** **ii. Does your business model assume more export for freight would be attainable under your proposals, and if so, what is the basis for this assumption?** **iii. Provide a copy of your business model.**
		Applicant's Response: i. This is a fair assessment of past operations at Manston Airport, the reason being that there were no facilities for handing outbound cargo. ii. Yes, the model assumes a similar split between imports and exports as shown in APP-085 Volume III Tables 1, 3 and 4 on page 14 and 15. Details of the assumptions are shown in APP-085, Volume III, paragraph 3.2.3. In terms of imports/exports and backloads, the following conservative assumptions and calculations have been used in the Applicant's forecast:

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		• Dedicated freight airlines (US) – 80% import/20% export • Dedicated freight airlines (Africa) – 100% import with a 5% backload from Year 3, rising to 10% in Years 5 and 6, with an additional 5% increase added every two years. The African market showed 24.8% growth in FTKs in 2017 (IATA, 2017). • Integrator movements – 100% outbound with a backload (import) calculation of 20% included in Years 2 and 3, rising by an additional 5% every two years • Integrator feeders – 100% inbound (import) traffic with 10% backload possibility added to Year 5, 15% to Year 9, and 20% thereafter • Fresh fish and spider crabs – 100% export with a backload potential of 5% from Year 3 with an additional 5% added every two years thereafter • Middle East airlines – both import and export with backload possibilities. The Middle East market showed 8.1% FTK growth in 2017 (IATA, 2017). • Live animal operations – both in and outbound to show return journeys for most animals • Pakistani airlines – export from Manston with backloads starting at 10% rising slowly to 30% • Russian airlines – export from Manston with strong backload possibilities starting at 50%, rising to 70% • Niche freight operations – generally imports with backload potential commencing at 10% rising to 30% over time • Military movements – outbound only • Humanitarian and medevac – outbound only iii. Please see attached at Appendix F.1.5 in TR020002/D3/FWQ/Appendices.
ND.1.33	The Applicant Azimuth Associates	The AviaSolutions report considers that if Manston Airport were to re-open, that the most likely role would be to serve smaller freight operators and the larger operators on an ad-hoc basis, and states that "*There is no compelling reason to believe that the airport would be able to generate appreciably more freight activity than previously, other than in the context of a shortage of airport capacity in the London area*" [para 6.3] **Which markets and services does your business model consider your proposal would be able to attract, given the view above?**

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		Applicant's Response: The Applicant's case is that there is a shortage of airport capacity in the London area. It is not meaningful to consider the situation without that context. The proposed development involves 19 stands rather than what was a single freight stand previously. The shortage of capacity creates demand for Manston Airport through: • Lack of available slots at other South East airports • Bumping of freight from passenger aircraft • Security issues particularly with outsized cargo • Speed of turnaround and bottlenecks for air freight The markets that the Applicant's business model proposes to attract are: • Perishables including fruit, vegetables, flowers, fish, and shellfish • Outsized freight • Express freight • Formula One and luxury cars • Thoroughbred horses • Time sensitive items such as aircraft and the oil and gas industry

Ref No.	Respondent	Question
		• Humanitarian and military flights In geographical terms: • Africa particularly for the import of flowers, fruit and vegetables • Algeria for the import of fruit and vegetables • China for the import of consumer goods and export of luxury items • Middle East particularly for export markets • Pakistan including the export of clothing and the import of consumer goods • Russia for gas and oil equipment and the export of luxury items • US for a range of import and exports • China is also a potentially large market but insufficient data was available at the time of forecasting to include details
ND.1.34	The Applicant Azimuth Associates	The AviaSolutions report considers that the geographical location of the airport would affect the demand to use the airport for freight: "*Infrastructure, and the associated knowledge, skill and supporting industry at airports such as Heathrow and Stansted, as well as the major European hubs such as Frankfurt, and Paris, would be almost impossible for Manston to replicate. The geographic location of the airport, tucked into the corner of the UK, cannot compete with airports such as East Midlands for Integrator services that are sold as fast delivery, due to the increases in surface transportation times*" (para 8.3) **i. How do you consider the location of Manston Airport would affect the demand for freight flights at the airport?**

Ref No.	Respondent	Question
		ii. Do you consider it likely that infrastructure can be successfully provided at Manston to provide an alternative to existing established airports?
		Applicant's Response: i. Manston is less than an hour by road to and from the M25 and, as shown in answer ND.1.8, is nearer in time and distance to various London destinations than East Midlands Airport. The airport has good existing road links, and the application will improve the route from the airport entrance to the M25. The Lower Thames crossing will further increase accessibility to the north. By contrast, the time taken from East Midlands Airport to central London (Marble Arch) is around 120 miles and around 2.5 to 3 hours depending on traffic. In interviews with hauliers on behalf of the Applicant, none said Manston's location was a problem. Full details are provided in APP-805 Volume II. Indeed, York Aviation said, in 2011, that Manston would benefit from the relocation of existing services from other London airports. They said: "*It is for the relocation of these services that MSE is ideally geographically positioned*" (APP-085, Volume I, para 7.2.3). Evidence from a number of past users of Manston indicate that location does not diminish demand. For example, The Manager of Charter Sales at National Airlines said: "*Having worked for the Manston regulars such as Das Air, African International (Intavia) and MK Airlines along with many other carriers while I worked for Chapman Freeborn in the UK. MSE was always our first choice for freighter charters. When it closed it was a great loss!"* (AAP-085, Volume II, 4.1.22) The Group Supply Chain Director of Finlays Horticulture said: "*As a previous large customer to the services of Manston airport, we felt it important that Finlays wrote to explain their previous business and ongoing support for Manston as an infrastructure hub for UK airfreight importation. . . . Finlays brought in a large quantity of freight (approx. 400t) on various carriers weekly through the airport, as they had become specialists in handling perishable cargo. . . .*

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		The main factors we see specific to Manston are as follows: • *Manston were unique in being able to offer such a quick turnaround of getting airfreight onto lorries, with suitable perishable handling facilitates, and flexibility in dealing with freight day or night. The freight that we now have arriving at Stansted (approx 2 hours closer to Finlays sites by lorry than Manston) is regularly arriving 6 hours later than the equivalent Manston vehicles.* • *Manston is one of only 5 UK airports to have a BIP (EU Border Inspection Post) facility. Trade has moved and is still moving to Europe as a consequence of the shutdown.* • *The overall limits of air freight capacity and restricted handling services in the South East continue to increase, and for the perishable air freight business, other airports are struggling to match the quality and speed of service for which Manston was renowned.* • *Manston's location to major roads and ports meant that the development of more trade was a distinct possibility and its unique air freight handling service makes it very desirable to the cargo business. In addition Customs, Port Health, FERA and other agencies were all in place to facilitate the airport's operation.* *In our dealings with Manston over the last decade or more we have been very satisfied and actively supportive by putting our cargo business there. It was with deep regret that Manston management took the decision to close the airport. It is noted that other interested airport operators have shown serious interest about taking on Manston as an airport, we strongly hope that a future for Manston can be found.* " ii. The Applicant's plans for the airport show considerable and extensive infrastructure development both at the airport, including up to 19 stands for freighter aircraft, and highway improvements to ensure better access to it, which will provide an attractive alternative to existing established airports, whose shortcomings in providing dedicated freighter operations to serve the south east have been amply demonstrated.
ND.1.35	The Applicant	**How many flights do you expect to see generated from perishables?**

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	Azimuth Associates	Applicant's Response: The Applicant expects around 3.5% of flights in the first 3 years to be perishables dropping in percentage terms as the overall business develops. By year 5, this will be about 2.5% and will stabilise to about 2.3% thereafter. Thus e.g. in year 20 when the total cargo ATMs are forecast to be 17,170, of those 394 will be perishables.
ND.1.36	The Applicant Azimuth Associates	Mention is made in [APP-805, 4.4.8] of KLM recommencing operations from Manston. **i. What percentage of such passengers do you envisage would be using such a route to use Schipol as a hub?** **ii. Report on any progress with negotiations with KLM.**
		Applicant's Response: i. The forecast for a twice daily service to a major hub (such as was provided by KLM in the past at Manston Airport) as a percentage of the total are approximately as follows: Years 3 to 5: 11% Years 6 to 10: 8% Years 11 to 14: 7% Years 15 to 19: 6% Year 20: 5%

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		ii. Discussions have taken place between the Applicant and KLM, and were updated in February 2019. In these discussions, KLM has indicated an interest in reinstating a double daily service from Manston to Schipol.
ND.1.37	The Applicant Azimuth Associates	Evidence is provided relating to Frankfurt Airport [APP-805, 4.2.50-54] and its freight traffic. It is stated that cargo volumes have fallen since 2010 due to night restrictions and that a significant amount of cargo landing at Frankfurt is destined for locations outside Germany, including the UK. **i. Does the reduction in cargo volumes due to night restrictions indicate that cargo traffic partially relies on night flights?** **ii. What percentage and volume of freight at Frankfurt is bellyhold freight?** **iii. How much freight do FedEx carry at Frankfurt, in volume terms?** **iv. Provide evidence for the assertion that a significant amount of cargo landing at Frankfurt is destined for locations outside Germany, including the UK.**
		Applicant's Response: i. Night restrictions at a congested airport clearly reduce cargo volumes. However, this is not necessarily the case with an uncongested freight-focused airport (as Manston is being designed to be), since freighter operators can land, offload, upload and take off throughout the day without being prevented from doing so by a busy passenger schedule. Frankfurt initially saw a small reduction in freight tonnage in the years immediately after the night-time curfew but has since recovered to slightly above previous levels. More than 2.2 million tonnes of freight passes through Frankfurt Airport each year indicating that cargo traffic can be handled successfully during normal operating hours without the need for full operations at night. ii. The share of freighter aircraft freight climbed to a new record level of 63.0% in 2018 compared to bellyhold (measured in metric tonnes). Frankfurt Airport (FRA) handled 2,213,887 tonnes of freight in 2018 and 21,566 freighter ATMs (this updates

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		table 6 in APP-085 Volume I). Main deck freight increased by 0.5% over 2017 whilst bellyhold freight decreased by 3.2%. (Figures extracted from Frankfurt Airport monthly traffic results December 2018). iii. It is not possible to extract figures for any specific carrier at Frankfurt Airport. However, the FedEx operation at Frankfurt is relatively small as it is a sub-hub to their German main hub at Cologne (CGN). FedEx is not currently a key player in the German integrator market. There are no FedEx operations on Saturdays and Sundays. The published FRA winter flightplan shows four active flight numbers from Monday (day 1) to Friday (day 5). These are: FltNo. Equipment Day Sectors FX032 Boeing 777F 5 Memphis-CGN 1 CGN-Munich, Munich-FRA, FRA-Memphis FX 033 Boeing 777F 1 Milano-FRA, FRA-CGN FX 003 Boeing 777F 2,3,4 Paris Charles De Gaulle (CDG)-Munich, Munich-FRA, FRA-Memphis FX 036 MD11F 2,3,4 Indianapolis-Stansted, Stansted-FRA, FRA-Paris CDG In total there are only four departures per week by 777Fs to the FedEx global hub Memphis, no arrivals from Memphis, and a number of feeder flights to either CGN or CDG. The 777F cargo compartment volume is around 653 m^3 for a total of 37 ULDs plus 17 m^3 for bulk load. Maximum load is 103 metric tons. The MD11F cargo compartment volume measures up to 610 m^3 for a total of max. 34 ULDs, maximum load is 92 metric tons. Detailed breakdown of tonnages per flight/routing is not publicly available. The three FedEx flights listed - Cologne Bonn, CDG Paris and Memphis are all into main FedEx hubs and will therefore be feeder flights carrying relatively low tonnage. Frankfurt is dominated by Lufthansa who fly bellyhold and freighters during the day because of the night time constraints and because Cologne Bonn is FedEx main base in Europe.

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		iv. The Azimuth Report [APP-085] assumes that a significant amount of the 2.2 million tonnes of freight that lands at Frankfurt is destined for locations other than Germany, including the UK, on the basis that 2.2 million tonnes is a considerable amount and could not be destined for German markets alone. As London is a major economy with scant landing slots available for cargo, the report assumes that some freight is destined for London. The Applicant is seeking the release of data on this issue and will provide it to the examination if its owners permit.
ND.1.38	The Applicant Azimuth Associates	The RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] considers that the fall in cargo ATMs has been driven by market trends towards bellyhold, described as cheaper and more flexible, whereas your analysis [APP-805] considers that the market may move away from bellyhold to pure freighters. **How do you reconcile such opposing views on the trend for cargo in the UK?**
		Applicant's Response: Bellyhold freight is cheaper only on routes where demand outstrips supply. Bellyhold cannot be described as more flexible, because it is tied to passenger routes and passengers are prioritised. Flexibility is obtained through dedicated freighters that can carry goods where and when needed without the encumbrance of passenger timetables, destinations, turnarounds, etc. The suggestion that bellyhold is more flexible is plainly wrong. Bellyhold air freight currently dominates by percentage in the UK, but this is the reverse of the position globally (UK 70/30 Global 44/56). In 2018, Frankfurt Airport moved 63% of freight on dedicated freighters, a sharp contrast to the picture in the UK. The full record from the Monthly Traffic Results Frankfurt Airport with Annual Report for December 2018 is shown below: "*Despite a lower load factor for freighter aircraft, the increased offer of main deck capacities effected a slight increase (+0.5 %) of freight on freighter aircraft (including transit). Bellyhold freight was down by 3.2 %. The share of freighter*

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		aircraft freight in 2018 climbed to a new record level of 63.0 %. This is 0.3 percentage points above the old record set in 2016." (Page 7) As another example, 2017 data shows there were 3,000 freighter movements at Heathrow compared to 17,800 at Schiphol (data from the Steer Report, included at Appendix ND.1.13). This is a clear indication that the UK freight market is out of step with the rest of the world. Connectivity plays a major role in providing shippers with a choice between bellyhold and pure freight options and certainly Heathrow is the world's most connected airport (2018 figures). However, despite Asia ranking highly in terms of connectivity, around 80% of the air freight between Asia and Europe is carried on dedicated freighters. Frankfurt also enjoys a high level of connectivity but ship 63% of freight on dedicated aircraft. York Aviation in their 2015 work for TfL and the FTA (in Appendix ND.1.7 in TR020002/D3/FWQ/Appendices) say: "*Air freight tonnage at the London airports has grown over the last 20 years. However, this disguises a worrying trend. The market grew rapidly until 2000, but since that time it has largely stagnated. This stagnation has coincided with growing capacity constraints at Heathrow and the inability of the London hub to grow in terms of Air Transport Movements (ATMs). The air freight market in London is already being constrained by the capacity issues at Heathrow. It is also seems clear that to a significant degree other airports cannot step in to provide relief as they do not have the long haul networks to support bellyhold capacity. Only Stansted, with its significant spare runway capacity, has emerged as an alternative for pure freighter airlines*." (Page 4) Freighters maintain a global market share advantage for several reasons, including providing highly controlled transport, direct routing, reliability, and unique capacity considerations (volume, weight, hazardous materials, and dimensions). Perishable and time sensitive goods rely on dedicated freighter transportation. Further detail is provided in document number APP-085 Volume I Section 6.3. Ecommerce is one of the drivers for growth in air freight and demands rapid delivery that may only be met by dedicated freighter operations and the potential impact is described in APP-085 Volume I section 6.1. Expanding freight markets include thin passenger routes, which would therefore be insufficient to handle the volumes or speed of delivery necessary.

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		Taking all of the above into account, it is likely that capacity constraints in the U airport network, particularly in the South East rather than a general long-term trend toward bellyhold freight provide an explanation for why the UK freight market is currently dominated by bellyhold freight. The UK freight market would be much better served with a greater degree of choice about how freight is flown, and the proposals for Manston Airport provide this choice.
ND.1.39	The Applicant Azimuth Associates	Your forecasts [APP-805] consider around 5,000 freight air transport movements in year 2, some 11,600 in year 10 and around 17,000 in year 20. Effectively this would mean in year 2, after 1 year of operation, that Manston Airport would be the 3rd largest airport for pure freight in the UK (based on 2017 CAA figures). **Given historical data, the location of Manston and the presence of established cargo hubs in the UK at Heathrow, East Midlands and Stansted, do you consider this to be a realistic proposition?**
		Applicant's Response: Yes. The analysis of the market shows a pent-up demand for freighter handling services in the South East of the UK. In the UK, Government forecasts show that all UK's main airports except Manchester (where an increase in capacity is expected) will be full by 2050. In London, the need for additional runway capacity is greater than originally calculated. All five of London's main airports will be completely full by the mid-2030s, and four of them within 10 years. The third runway at Heathrow is forecast to become full only a few years later. Already HGVs are used in place of direct flights to truck goods to and from the UK and Europe. In 2017, global cargo volumes grew by 9.3%, more than double the increase in the previous year. In Europe, the increase in cargo volumes was 11.9%. In London, total cargo tonnage increased by 8.8% and dedicated freighter tonnage up 5.5% for the rolling year to Q4 2017 (CAA, 2017, p. 10). There were also improvements in load factors, yields and revenues. Speed is the most important selling point for air cargo transport and demand is increasing for a number of reasons including: • The need to restock inventories quickly to meet demand

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		• Just-in-Time and inventory reduction methods • The need to transport perishable and time sensitive items • Declining costs as a result of liberalization and technological progress • Overseas production facilities and global supply chains • The growing importance of e-commerce • Customer demand for rapid delivery and return of products purchased online E-commerce is set to be a game changer for the air freight market, with customers demanding next day delivery. Amazon is leading the way with its purchase of a fleet of dedicated freighters. The impact of e-commerce on air freight has already led to capacity issues and rate increases. Indeed, the competing demands of Low-Cost Carriers and all-cargo operators are a major issue in the global debate over airport capacity. Clearly Heathrow is the leading bellyhold airport in the UK and this is unlikely to change. East Midlands serves a large market to the north. However, capacity at Stansted is being used to accommodate the growth in demand for passenger flights. TfL is working to improve passengers' surface access to Stansted Airport and once in place, these improvements are likely to stimulate the demand at Stansted for passenger flights at the expense of freight. Ryanair already has increased the frequency and number of routes it provides from the airport. Ryanair's expansion will continue to increase pressure on slots, particularly at peak times such as early morning, Ryanair is the dominant carrier at Stansted Airport and, since the low-cost carrier model is based on fast turnarounds, the airline will not tolerate interference from cargo handling. Ryanair is increasing their offering to more distant destinations including Turkey, North Africa, Cyprus and the Middle East. For the airline to operate four rotations per day to maximise the profitability of each aircraft, late evening and potentially night time slots will be required. It seems likely that MAG will want to maximise the use of their infrastructure, in line with the DfT's desire to make full use of existing capacity and this is likely to focus on the passenger market. At present, Stansted Airport has capacity to accommodate a number of freighter flights. However, cargo-only flights account for only around 8% of ATMs at Stansted. Freight carriers have traditionally used night slots at the airport and these may become less available if the Low-Cost-Carriers utilise them. Since the cap in place at Stansted Airport has increased from 35 million passengers per annum to 43 million but without any increase in ATMs and the Airports Commission ruled Stansted out of its preferred three options for airport

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		expansion, it is likely that freighters will seek alternative airports. Manston would provide an ideal alternative and therefore place Manston in third position in terms of freighter ATMs and tonnage behind Heathrow and East Midlands.
ND.1.40	The Applicant Azimuth Associates	**Your forecasts [APP-805] do not appear to include mail. Is this correct?**
		Applicant's Response: Yes. Mail services tend to require night operations and have therefore not been included.
ND.1.41	The Applicant Azimuth Associates	The RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] estimates that there were less than 18,000 non domestic cargo ATMs for England and Wales in 2017.
		Applicant's Response: This is incorrect. 2018 CAA data shows a total of 53,628 cargo ATMs, nearly three times as many as that figure. It appears that the figure used by Pinsent Masons is for daytime flights only rather than for total ATMs. They estimate that around 50% of all cargo flights at Stansted and East Midlands operate at night. It is clear from the Stansted hourly arrival and departure demand that there is limited availability at many times of the day. It is the Applicant's case that if freighter airlines are offered landing and take-off slots with rapid handling during the day, that their demand for night flights would be limited. East Midlands airport increased the number of passengers through their terminal by nearly 20% between 2012 and 2017, from 4,068,000 to 4,878,000 (CAA data). If passenger flights were to continue to increase, a higher percentage of cargo ATMs may have to operate at night. As with Stansted, this does not necessarily and in all cases indicate that freighter

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		operators would not be able to fly during the day if they were offered suitable runway arrival and departure slots and rapid handling, unencumbered by a large passenger operation. This table is taken from the 2018 CAA Airports data Table 6. The data excludes non-reporting airports (Alderney, Guernsey, Isle of Man, and Jersey,) since these are mostly domestic. Almost all other ATMs are non-domestic since air freight is rarely used to move cargo within the UK (figures include Scotland and Northern Ireland).

	London	**All other**	**Total reporting**
January	1,190	3,413	4,603
February	1,093	3,119	4,212
March	1,226	3,352	4,578
April	1,109	3,117	4,226
May	1,201	3,418	4,619
June	1,174	3,260	4,434
July	1,195	3,407	4,602
August	1,139	3,448	4,587
September	1,096	3,224	4,320
October	1,160	3,440	4,600
November	1,306	3,628	4,934
December	1,146	2,767	3,913
	14,035	39,593	53,628

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ND.1.42	The Applicant Azimuth Associates	The RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] states that the DfT aviation forecast projects no growth in UK freighter ATMs in the next 30 years. **What are your views on such forecasts and how they apply to your proposal?**
		Applicant's Response: The DfT has made it clear that they do not forecast freight ATMs. The RR from Pinsent Masons LLP is therefore incorrect and refers to an assumption made by the DfT rather than being based on evidence. The DfT has confirmed in meetings that their assumption of 0% growth in air freighter movements is not a forecast. Government figures do show that globally, air freight grew more than twice as fast as overall global trade during 2017 and that the UK handled record quantities of freight. In order to clarify the DfT's position on their zero percent assumption, the Applicant contacted the Department's Aviation Policy team. The letter on behalf of the Applicant and the DfT's response are appended at Appendix ND.1.14 in TR020002/D3/FWQ/Appendices. Specifically, the Applicant's letter concludes that: "a zero percentage growth forecast for dedicated freighter aircraft to and from the UK is unrealistic. It may be that Government forecasters have modelled very limited freighter access to UK airports whilst the market continues to be constrained and this pragmatism accounts for the zero growth forecast. However, this figure is misleading for those planning future capacity needs. A full picture of the demand for dedicated freighter movements is required urgently so that airlines, airports and other agencies can make appropriate decisions for the economic wellbeing of the UK." The DfT is planning to produce a UK forecast for dedicated freighters, which is awaited by the Applicant and should be in line with Industry forecasts that show considerable projected growth. In terms of actual figures, air cargo traffic grew 10.1% in 2017, more than double the long-term average growth rate of 4.2%. 2018 figures are still being finalised.

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ND.1.43	The Applicant	The Statement of Reasons [APP-006, para 4.25] quotes the 2003 White Paper, The Future of Air Transport, as acknowledging that Manston 'could play a valuable role in meeting local demand and could contribute to regional economic development'. **To what extent have the changes in the global and domestic economic situation since 2003 rendered this White paper redundant?**
		Applicant's Response: The number of flights has grown considerably since 2003 with increasing pressure on airport capacity. The government's figures (UK Aviation Forecasts: Moving Britain ahead) show that all London airports are at or almost at capacity. Global and domestic economies have cycled as usual during the intervening 15 years but growth in aviation has continued and the need for additional airport capacity in the UK and Europe has been made clear. The Applicant sees no reason to assume that the 2003 White Paper conclusions are invalid or that Manston Airport should now be discounted when meeting demand is even more pressing than it was in 2003.
ND.1.44	The Applicant	At one of the open floor hearings, the prospect of Thanet Parkway railway station was raised. **Do you consider there to be any synergy between the proposed operation at Manston Airport and the rail station, in terms of cargo capability?**
		Applicant's Response: The application does not rely on the establishment of a railway station at the proposed Thanet Parkway site. However, discussions between the Applicant and both KCC and Network Rail have recently taken place with a view to exploring ways

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		in which synergies might be achieved. The Applicant believes that any synergy between the Airport and the rail station will not be achieved in the short to medium term.
ND.1.45	The Applicant	**Is there any update on negotiations with any airlines/integrators or freight forwarders?**
		Applicant's Response: Discussions and negotiations are continuing and are by their nature confidential and commercially sensitive.
ND.1.46	The Applicant	**Stone Hill Park (RR-1601] Airports NPS[3]** The 2018 Airports NPS exists, but it does not provide explicit policy support to Manston [APP-080]. **Can the Applicant point to any other planning policy, either national or local, which explicitly provides policy support to re-open Manston Airport?**
		Applicant's Response: The principle of the Proposed Development to reopen Manston Airport is supported at national, regional and local policy levels, but it is only at local level that the airport is explicitly supported by name. At a national level, the Airports National Policy Statement centres on the third runway at Heathrow and does not explicitly provide support for any other airports. Rather it provides a policy framework governing the means by which the Heathrow

[3] Anywhere reference in this document to the Airports NPS should be taken to mean Airports National Policy Statement: new runway capacity and infrastructure at airports in the south-east of England (2018)

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		project should be advanced, and introduces the policy of other airports 'making best use of their existing runways' at paragraph 1.39. The Government's draft new Aviation Strategy to 2050 echoes support for airports other than Heathrow making best use of their existing runways (December 2018 Consultation Draft – paragraphs 1.21, 3.6, 3.11 and 4.3). Specifically reopening Manston Airport as a cargo hub fulfils the objective to support air freight, expressed at paragraph 4.49 as "the Government supports continued growth of the air freight sector particularly making best use of existing capacity at airports, to continue to facilitate global trade for UK businesses and consumers." The 2003 Air Transport White Paper (which was withdrawn on 5 March 2018) was geographically structured and site-specific in its policy making, and explicitly mentioned Manston when setting out the role and presumption in favour of growth for smaller south east airports (see in Paragraphs 11.98-11.99). Current strategy documents have tended to be more generic in their discussion of such airports and the location of future freight capacity. The Airports Commission in their Interim Report (December 2013) was supportive of Manston Airport in recognising that it "presents some potential as a reliever airport" but considered that it did not address the larger question of London and South East (passenger) capacity (Annex 2 : Assessment of Long-Term Options). The reliever airports concept is supported by Government as it provides dedicated support for the business and general aviation markets with the potential additional benefit of reducing use of congested airports for this traffic. See paragraphs 6.67 to 6.71 of the Planning Statement [APP-080] for further details of the Airports Commission's conclusions on Manston. It is clear that the Applicant's proposal to use the airport as a dedicated cargo hub will assist in relieving the congested air freight market in the South East. At a regional level, the draft new London Plan (December 2017) states that the Mayor is committed to working with wider south east partners to find solutions to shared strategic concerns including the wider needs for freight. Policy T8 is supportive of additional aviation capacity in the South East of England provided it would meet London's passenger and freight needs recognising that this is crucial to London's continuing prosperity and to maintaining its international competitiveness and world-city status. Policy T8 further states that better use should be made of existing airport capacity, underpinned by upgraded passenger and freight facilities and improved surface access links.

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		At a local level, there is a Kent County Council Position Statement on Manston Airport (July 2015) – "the elected members of the County Council fully support the continued regeneration of Manston Airport and East Kent and their ability to deliver significant economic growth and job opportunity.", and a document entitled Facing the Aviation Challenge – Kent County Council (August 2014), where Kent County Council recognise that a financially viable and sustainable future must be found for Manston Airport and that this should focus on the use of the site for aviation and related services as well as other businesses that can bring jobs and economic growth to East Kent. The East Kent Growth Framework – the East Kent Growth Plan – Final Draft Report (2017), produced by the Kent and Medway Economic Partnership recognises that upgrading infrastructure within and around East Kent will also bring national benefits, with the effect that the potential return on investing in East Kent's infrastructure will be higher than elsewhere in the UK due to the area's strategic location between mainland Europe, London and the rest of the country. Manston Airport is nationally significant infrastructure that will also benefit the local area and the regions. Finally, the Thanet District Council (TDC) local plan provides for the reopening of Manston Airport both in its emerging draft and within the saved policies of the 2006 local plan. In the former, the local plan recognises the need for the Manston Airport site to be redeveloped, recognising that the DCO process currently underway should have priority and not identifying the airport site as an allocation for any other use. In the adopted local plan (adopted when Manston was still open) explicit support is given for the airport in policies EC2 and EC4. On 18 January 2018 TDC Councillors rejected the emerging Local Plan principally because it did not safeguard the Manston Airport site for airport uses. The Regulation 19 version of the draft new Local Plan (October 2018) no longer allocates Manston Airport for a mixed-use settlement and fully recognises RSP's DCO proposals and the established use of the airport which is for aviation uses.
Ns.1 Noise and Vibration		

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Ns.1.1	The Applicant	**Dover District Council (RR-0490]** Dover District Council (DDC) has noted that properties in the Dover District fall outside of the noise contours as referred to in paragraphs 2.4 and 2.5 of the Noise Mitigation Plan [APP-009] concerning noise insulation funding. Specifically, this relates to: "*...residential properties with habitable rooms within the 63dB LAeq (16 hour) day time contour...*' and '*...residential properties with bedrooms falling within the 55dB LAeq (8 hour) contour...' and the provision of '...reasonable levels of noise insulation and ventilation for schools and community buildings within the 60dB LAeq (16 hour) daytime contour..."* DDC has noted that these levels are greater than those given with respect to acoustic insulation under the Heathrow Expansion consultation in January 2018 which refers to 60dB LAeq (16 hour) contours for an inner zone and 57dB LAeq (16 hour) contours for an outer zone. In addition, the CAA's recent findings on Aircraft Noise and Annoyance (February 2018) makes reference to UK policy in relation to an 'annoyance threshold' and highlights 57dB LAeq (16 hour) as marking the approximate onset of significant community annoyance. DDC recommends (as does KCC in [RR- 0974]) that the daytime noise contour of 60dB LAeq (16 hour) used for schools and community buildings is also used as the daytime noise contour qualification for noise insulation. **What is the Applicant's view on the DDC recommendation?**
		Applicant's Response: Noise insulation is included in the Noise Mitigation Plan [APP-009] to avoid significant adverse effects of noise as required by the first bullet point of paragraph 5.68 of the Airports National Policy Statement and in accordance with the first aim of government noise policy. For the purposes of this proposal, the Significant Adverse Effect Level (SOAEL) has been set at

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		63 dB LAeq,16h. Government policy states that above this threshold, significant observed adverse effects on health and quality of life can begin to be observed in an average person. DDC makes a comparison with Heathrow's proposed noise insulation scheme. We do not consider it appropriate to compare Manston Airport with Heathrow in terms of likely noise impacts. A resident living within Heathrow's noise insulation "inner zone" may have approximately 600 aircraft per day fly overhead (approximately one every 90 seconds), whilst a resident located within the Manston 60 dB LAeq,16h noise contour may have up to 36 aircraft fly overhead per day in the peak operating year (approximately 4 – 5 aircraft per hour). DDC also make reference to the CAA's recent findings on Aircraft Noise and Annoyance (CAP 1588 February 2018). The statement quoted, provided in its full context below, is with reference to the Government's 2003 White Paper (The Future of Air transport Dec 2003) and subsequent Aviation Policy Framework 2013: "*The 2003 Air Transport White Paper subsequently defined 57dB LAeq,16h as marking the approximate onset of significant community annoyance, and this was reaffirmed in the Government's 2013 Aviation Policy Framework.* " At paragraph 5.25 in its consultation document of February 2017, entitled: UK Airspace Policy: A Framework for Balanced Decisions on the Use and Design of Airspace, the Government noted that there are several issues with the statement: "daytime aviation noise level of 57 dB LAeq 16hr as marking the approximate onset of significant community annoyance". Consequently, this statement no longer appears in Government policy documents.
Ns.1.2	The Applicant	**KCC [RR- 0974]** Paragraph 12.5.8 of the Environmental Statement [APP-034] describes the measures in the Noise Mitigation Plan [APP-009] and one of these is a voluntary quota count system. The Annual Quota Count is 3,028 (this is for noise emissions, not number of movements, between 23:00 and 07:00). The proposed quota equates to approximately 8 quota count points per night and given that paragraph 12.7.40 of the ES [APP-

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		034] states the forecast is to handle 7 aircraft during a typically busy night period, this is possible (given a QC/1 aircraft would use one of those points). The Noise Mitigation Plan currently has no dates on it. **i. How long does the Applicant propose the quota count system will apply?** **ii. When would it be subject to review and by whom?**
		Applicant's Response: i. The question's description of the Night Noise Quota component of the Noise Mitigation Plan [APP-009] described in the Environmental Statement [APP-034] is correct. The Applicant proposes that the quota count system will apply in perpetuity, or until agreed to no longer be required by the Local Planning Authority or other relevant authority. ii. If it were decided to amend the quota count, then this would be effected via an application to the Secretary of State to amend the DCO.
Ns.1.3	The Applicant	**KCC [RR- 0974]** At Year 20 in the daytime, 115 properties are forecast to be within the Significant Observed Adverse Effect Level (SOAEL) and 8 in the Unacceptable Adverse Effect Level (UAEL - meaning above 69 dB $_{LAeq}$ 16hr) [APP-034]. Insulation for those in the SOAEL will reduce the noise exposure and remove them from the 'significant' category, and the relocation scheme will apply to those in the UAEL. **i. Given the number of residents in the SOAEL (63 dB LAeq 16hr) that may still experience adverse effects (some more so than others, and retaining significant effects in their garden and with open windows – see Basner et al**

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		2006[4]), would the Applicant be willing to extend the relocation scheme to those 115 dwellings on a discretionary basis if they are not within the formal scheme? **ii. Can the Applicant make a copy of Basner et al 2006 available to the examination?**
		Applicant's Response: i. The Applicant does not believe there is evidence to warrant committing to a relocation scheme for the additional 115 properties until actual operations commence and the effects of the Proposed Development can be more accurately measured. While the Applicant has provided a 20-year environmental assessment, the Applicant believes that it may never reach the effects outlined in year 20. This is because aircraft are anticipated to continually become quieter. The Applicant will keep this issue under constant review. ii. Yes, please see Appendix Ns.1.3 in TR020002/D3/FWQ/Appendices
Ns.1.4	The Applicant	**PHE [RR-1608]** It appears the Applicant has determined significant and unacceptable adverse effect levels (Significant Observed Adverse Effect Level (SOAELs) and Unacceptable Adverse Effect Level(UAELs)) for daytime noise exposure based on recommendations for airport actions in the Aviation Policy Framework (APF) (2013) (Environmental Statement paragraphs 12.6.64 and12.6.65 [APP-034]). The night time SOAEL appears to be chosen as the level where adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed and there is evidence that the risk of cardiovascular disease increases, according to the WHO Night Noise Guidelines[5].

[4] Section 12.6 [APP-034]
[5] WHO Night Noise Guidelines for Europe, 2009

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		However, paragraph 15.7.8 of the ES [APP-034] states: *"Given the multidisciplinary nature of health and the strength of evidence for each health pathway, the individual assessment protocols (i.e. for changes in air or noise exposure), have been applied to inform a judgement on the magnitude and distribution of change, based upon:* *the magnitude of potential impacts;* *the sensitivity of the communities affected; and* *identified local health needs and objectives."* We could not find reference as to how the 2nd and 3rd bullet points were considered in the judgement of significance of noise effects. **Point to where in the ES [APP-033, APP-034 and APP-044] where bullet items 2 and 3 were considered.**
		Applicant's Response: Bullet items 2 and 3 have been considered in Chapter 15 of the ES [APP-034] and Appendix 15.1 [APP-058]. Section 3 of Appendix 15.1 discusses the sensitivity of communities affected, based on analysis of the Community Profile data in Appendix 15.2. Paragraphs 15.4.2 and 15.7.6 in Chapter 15 then confirm that the sensitivity has been considered as 'high' for the assessment. Paragraphs 3.20–3.22 and Table 3.1 in Appendix 15.1 set out the health needs and objectives identified by the Kent Health and Wellbeing Board's Joint Strategic Needs Assessment, by the Kent Director of Public Health during consultation, and by policy in the NPPF. These local health priorities, needs and objectives are then summarised in Table 15.2 of Chapter 15.

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		Paragraphs 15.7.10 and 15.7.11 in Chapter 15 set out how these factors have been used to inform the judgement of effect significance, tailored to local circumstance, priority and need. Paragraph 15.8.39 in Chapter 15 is one example of this applied in practice to the significance of health effect from employment generation. The paragraph refers to the magnitude of employment levels with health outcomes, the sensitivity of affected communities, the embedded enhancement measures and the relevant local health objectives in supporting the judgement of an overall 'moderate beneficial' significance of effect. Paragraph 15.8.27 in Chapter 15 is a further example, where the information about baseline health (community sensitivity) has been applied to a precautionary judgement of a 'minor adverse' significance of effect. In the assessment of noise impacts on health and wellbeing, paragraph 15.8.15 refers to relevant health needs/objectives and paragraph 15.8.11 considers particular sensitive receptors (healthcare facilities) within the context of the overall 'high' sensitivity of the community specified in paragraph 15.7.6. These factors, together with the magnitude of impacts (predicted health outcomes) reported in that section, have informed the significance of effect predicted.
Ns.1.5	The Applicant	**PHE [RR-1608]** In its RR, PHE states that the Applicant appears to assume that sound insulation will address most of the adverse effects for those properties eligible for it [APP-009]. **Provide the evidence which demonstrates that noise insulation is effective at mitigating the adverse psychological and physiological health outcomes associated with aviation noise.**
		Applicant's Response: It should be noted that APP-009 is the Noise Mitigation Plan which in itself does not make a judgment as to the effectiveness of mitigation measures. The assessment relating to psychological and physiological health outcomes and the effectiveness of noise insulation can be found in Chapter 15 of the ES [APP-034]. In this regard the Applicant considers that adverse

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		health outcomes associated with noise exposure in affected buildings would be reduced in proportion to the effectiveness of sound insulation at further attenuating noise and reducing indoor noise levels. This view is based on the causal pathway illustrated in Figure 1.2 of Appendix 15.3 [APP-058], which relates health outcomes to underlying factors including annoyance, sleep disturbance and disruption to activities that are affected by noise levels inside buildings while people are present in them. The evidence supporting this is discussed in Appendix 15.3 and the references thereto. Paragraphs 7.10 in the HIA (Appendix 15.1) [APP-058] and 15.8.17 in Chapter 15 [APP-034] set out this position for the assessment of impacts. However, paragraph 15.8.18 in Chapter 15 is clear that the Applicant does not suggest that the mitigation proposed will necessarily fully remove the impact, and the predicted residual health and wellbeing effect is conservatively assessed to be 'moderate adverse'. The broad expectation that the reduction in adverse health outcomes would be proportional to the reduction in noise achieved by sound insulation may be modified by evidence of thresholds or non-linearity of exposure-response evidence in some cases, but this cannot be considered in detail prior to establishing existing outdoor to indoor attenuation at properties eligible for sound insulation and how much additional attenuation the sound insulation would achieve. Given that it is not possible, at this stage, to fully ascertain how effective the noise mitigation will be at a particular receptor, the assessment of health impacts has taken a conservative approach of assuming that it will not be in place which results in findings of moderate adverse effects. In reality, the provision of noise insulation is likely to reduce the health impacts below that level. Only limited direct evidence is available of the effect of noise insulation on reducing adverse health outcomes associated with aviation noise, as this has been little studied. The review, included at Appendix Ns.1.5 in TR020002/D3/FWQ/Appendices, of studies of transport noise 'interventions' undertaken to inform the recently published WHO Environmental Noise Guidelines for the European Region identified only one study of the effect of noise insulation for aviation noise on health outcomes (annoyance and sleep disturbance) and two studies of insulation for road noise. These studies did find a decrease in annoyance and sleep disturbance associated with installation of sound insulation. Overall, the interventions review found that the majority of studies of all types of intervention (including reductions in the noise at source, noise barriers, noise insulation or closing/moving transport infrastructure) showed that interventions were associated with changes in health outcomes, with the outcomes studied being mainly annoyance and sleep disturbance. However, the limited

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		number of studies and variability of methods meant that deriving a relationship between the magnitude of noise reduction and change in health outcome was not possible. The majority of environmental noise health evidence, as reviewed in Appendix 15.3, has considered the question from the other direction, indicating that higher external environmental noise (and, necessarily, also internal noise levels without changes to insulation) at locations where people are present in buildings for extended periods (i.e. residences, schools) is associated with higher risk of adverse health outcomes. Taking this together with the 'interventions' evidence, the inference that reducing internal noise levels would reduce this risk is considered reasonable and is very widely applied through national policy and the noise management measures employed at other airports, which routinely include sound insulation.
Ns.1.6	The Applicant	**PHE [RR-1608]** Annoyance was not included as a health outcome, as recommended by the WHO[6] and the Interdepartmental Group on Costs and Benefits Noise (IGCBN)[7]. **Can the Applicant express the noise impacts in terms of Disability Adjusted Life Years (DALYs)[8] and in monetary terms using the methodologies in [5,6]?**
		Applicant's Response: Yes, in light of the request from PHE, an additional assessment expressing potential noise exposure into Disability Adjusted Life Years, and conversion into financial terms will be provided at Deadline 4. However, the Applicant considers that such a methodology is more appropriate at the strategic/policy level (i.e. when comparing one airport to another) for entry into a cost benefit analysis. This methodology has less value at a project level, as it tends to mask not only the nature of the potential health outcome from noise (e.g. annoyance, impacts on academic performance, cognitive function, sleep

[6] WHO Burden of Disease from Environmental Noise, 2012
[7] Defra/Interdepartmental Group on Costs and Benefits Noise Subject Group, 2014
[8] Appendix 12.3 does refer to costed WebTag which address DALY's

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		disturbance etc.), but also the relative geographic distribution of potential effects. As a consequence the final financial value would not add any additional value to the investigation and mitigation of potential health outcome, and the consideration of health outcome might even be lost when considered against the net socio-economic benefit of the proposed development.
Ns.1.7	The Applicant	**PHE (RR-1608]** The assessment of night-time awakenings is based on an assumption of an outside to inside sound level difference of 21 dB (assumed to be A-weighted) [APP-057]. **i. Confirm that this is the yearly average referenced in the WHO Night Noise Guidelines.** **ii. The figure of 21dB was derived specifically to be used with the annual averaged Lnight metric. Explain why it is appropriate to apply a yearly average to a noise event assessment.** **iii. Provide separate assessments for windows open and windows closed scenarios.**
		Applicant's Response: i. The Applicant can confirm that 21 dB represents an average insulation value of 21 dB for a bedroom façade as adopted by the WHO Night Noise Guidelines for Europe (2009). See Footnote 6 of Chapter 12 of the ES [APP-034]. ii. The average figure concerns the average insulation provided by a window and does not change with the noise indicator used. The use of the yearly average noise reduction is consistent with the use of average aircraft forecasts to provide an assessment of the typical noise exposure. In addition, use of an absolute value for the noise insulation of a window, either open or closed, will not change the conclusions of the significance assessment. This is demonstrated below.

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		iii. The Applicant has undertaken assessments for windows open and windows closed. In addition to the 21 dB average insulation figure, the WHO Night Noise Guidelines for Europe (2009) provide figures for open and closed windows of 15 dB and 30 dB respectively. In Appendix 12.3 of the ES [APP-057], it was derived that 18 aircraft noise events at 80 dB LASmax will induce one additional awakening using the 21 dB figure for noise insulation. For closed windows 29 aircraft noise events at 80 dB LASmax will induce one additional awakening using the 30 dB figure for noise insulation. For open windows 14 aircraft noise events at 80 dB LASmax will induce one additional awakening using the 15 dB figure for noise insulation. During the maximum forecast year an average of seven night-time flights are forecast, hence aircraft noise alone will not typically result in additional awakenings in the open, average or closed window scenarios.
Ns.1.8	The Applicant	**PHE (RR- 1608]** PHE believe there is evidence which suggests that quiet urban areas can have both a direct beneficial health effect and can also help restore or compensate for the adverse health effects of noise in the environment[9]. Research from the Netherlands suggests that people living in noisy areas appear to have a greater need for areas offering quiet than people not exposed to noise at home[10]. PHE believe the proposed sound insulation scheme will not protect amenity spaces (such as private gardens) from increased noise exposure. Furthermore, although public Quiet Areas were included in the assessment of noise sensitive receptors, none were identified within the study area. No health impacts were recorded due to increased noise exposure in public green spaces, since none were identified as receptors [APP-058].

[9] Health Council of the Netherlands Publication no. 2006/12, 2006 LIFE09 ENV/NL/000423, QSIDE-

[10] The positive effects of quiet façades and quiet urban areas on traffic noise annoyance and sleep disturbance COST TD0804, Soundscape of European Cities and Landscapes, 2013

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		Given the increased noise exposure in private amenity spaces (APP-034], does the Applicant propose to create new tranquil public spaces that are easily accessible to those communities exposed to increased noise from the Proposed Development?
		Applicant's Response: The Proposed Development is constrained to the red line boundary, limiting opportunities to create new tranquil public spaces that are easily accessible to those subject to an increase in noise. However, the Applicant is willing to support such initiatives through the Community Trust Fund if this is felt to be desirable in discussion with the Community Consultative Committee.
Ns.1.9	The Applicant	**PHE (RR-1608]** The ES states at paragraph 15.8.13[APP-034] that: *"Construction noise would be temporary (with phased works) and subject to control by the CEMP ([APP-011] and Appendix 3.2 [APP-044]. No significant adverse impacts on health due to any temporary noise disturbance during construction are predicted".* The construction phases are predicted to extend from 2019 to 2036 inclusive. It is not clear to what extent noise sensitive receptors will be exposed to increased noise levels from construction during multiple phases. Therefore it is not possible to make an assessment whether construction noise can be classified as "*temporary*" for all sensitive receivers. **Define "*temporary*" within this context.**
		Applicant's Response: Construction noise impacts are defined as 'temporary' because construction noise at sensitive receptors is unlikely to exceed the Significant Observed Adverse Effect Levels (SOAELs) for construction noise for periods longer than one month. This is

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		because the works are phased, consist of discrete activities and will move around the construction site. The most intensive construction period will be phases 1 and 2 when the airport itself will be built over a period expected to be approximately two years. The intensity of construction activity will be significantly reduced during phases 3 and 4 which will be market led and take place over a much longer period. ES Tables 12.16 to 12.25 [APP-034] present construction noise predictions calculated over a period of one month when the activity is located closest to the sensitive receptor. In other months noise levels are likely to be lower than those presented in the tables.
Ns.1.10	The Applicant	**PHE (RR-1608]** PHE understands that for aviation noise, noise modelling was based on indicative, rather than finalised flightpaths. **Will the Applicant agree a strategy with relevant stakeholders to address this issue, and produce an additional HIA during the finalisation of flightpaths if consent is granted, to assess the full scale and distribution of localised impacts?**
		Applicant's Response: As set out in ES Table 12.1 [APP-034], the exact airspace options, operating principles and aircraft flight paths will be formalised through an Airspace Change Proposal (ACP), which is a separate consenting regime that would happen after the grant of the DCO. The ACP will be submitted through the Civil Aviation Authority's (CAA) ACP and the potential noise effects will be assessed following the CAA guidance within the Civil Aviation Publications (CAP). The ACP will therefore provide opportunities for communities to engage on future airspace options through an extensive consultation process as well as the preparation of a separate Environmental Statement to accompany the ACP.

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		The ACP would also provide an opportunity to produce an additional HIA following the finalisation of flight paths, and the Applicant commits to producing one at that stage. It should be noted that the prototype routes used for the assessment of aircraft noise were developed around design principles, namely 'avoid overflying populations', 'overfly populations' and 'swathe centreline'. An options appraisal of these principles is presented in Appendix 12.3: Methodology [APP-057], which, demonstrates that the variation in the population adversely effected and significantly adversely effected by noise across the design principles would be less than 1%, based on the operating conditions modelled.
Ns.1.11	The Applicant CAA	**Paragraph 12.2.2 of ES (APP-034] Responses to Scoping Report (APP-043]** Paragraph 12.2.2 of the ES lists CAA as a respondent to the Scoping Report consultation. Table A12.1.1 [APP-057] and Table 4.3 [APP-043] do not record the CAA response. **Can the Applicant point to where in its application documents the CAA's response can be found?**
		Applicant's Response: Paragraph 12.2.2 of the ES [APP-034] correctly states that the CAA was consulted with respect to noise and vibration. Appendix 1.2 [APP-057] includes the Scoping Opinion and provides a list of prescribed consultation bodies notified by the Planning Inspectorate under regulation 9(1)(a) of the Infrastructure Planning regulations, of which the CAA was one of those bodies. Paragraph 12.2.2 of the ES incorrectly lists the CAA as a respondent to the Scoping Report consultation. In fact, the CAA did not directly provide a response to the Scoping Report. The CAA were consulted with on a number of other occasions outside of the formal EIA scoping process A record of the meetings held with the CAA is provided at Appendix Ns.1.11 in TR020002/D3/FWQ/Appendices.

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Ns.1.12	The Applicant	**Vibration** Comparison of ES Table 12.11 and ES Table 12.26 [APP-034] potentially shows an exceedence of the 3mms^{-1} continuous vibration criteria for protected or potentially vulnerable buildings. **Provide further clarification regarding the conclusion that the peak particle velocity (PPV) is less than the adopted impact criteria for onset of cosmetic damage drawn in ES paragraph 12.7.30 [APP-034] in light of the predicted 3.6mms^{-1} external vibration.**
		Applicant's Response: Firstly, at this stage it is not known if any buildings in close proximity to vibratory compaction are 'vulnerable' and as such a precautionary approach has been taken. As defined in Table 12.11 of the ES [APP-034] the most onerous criteria for cosmetic damage to structurally sound buildings is 6 mms^{-1} which is higher than any of the vibration predictions presented in the assessment. Secondly, the peak particle velocity (PPV) is likely to be less than the adopted impact criteria for onset of cosmetic damage of significant effects at receptors exposed to vibration from vibratory compaction partly because contractors will be required to use measures to reduce vibration generated by controlling drum vibration amplitude, this requirement is captured in the CEMP and any such activity is expected to be the subject of a Section 61 application to Thanet District Council. ES Table 12.26 presents predictions of construction vibration at sensitive receptors during vibratory compaction for highway improvement works. At each receptor a range of PPV values are presented to reflect a range of potential drum vibration operation (See paragraph 12.7.29 of the ES [APP-034]). The lowest value in the range represents the vibratory compactor operating at a drum amplitude of 0.5mm. The highest value in the range represents the vibratory compactor operating at a drum amplitude of 1.5mm. At Spitfire Way a range of 0.7 to 3.6mms^{-1} PPV are predicted. Whilst the upper value of the range exceeds the 3mms^{-1} continuous vibration criteria for protected or potentially vulnerable buildings, the lower value in the range is below the criteria. This indicates that with the control measures indicated in the CEMP and enforced by TDC, works can

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		be undertaken at a drum amplitude that would not lead to exceedances of the most onerous criteria for cosmetic building damage at vulnerable buildings. In this regard it is a requirement of the CEMP that: • Contractors use Best Practicable Means (BPM) to minimise noise and vibration at neighbouring residential properties and other sensitive receptors arising from construction activities; and • Contractors obtain consents from the relevant local authority under Section 61 of the Control of Pollution Act 197412 for the proposed construction works, excluding non-intrusive surveys. Applications will be made to the relevant local authority. As stated in paragraph 12.7.32, the management of vibration is consistent with the requirement for the contractor to use BPM to reduce noise and vibration from construction works. Typically a contractor's Section 61 application would demonstrate through prediction how works are to be undertaken according to the principles of BPM. On this basis the Applicant considers that it is unlikely that vibration generated by compaction will lead to building damage at receptors close to the works.
Ns.1.13	The Applicant	**LOAEL and SOAEL [APP-034]** It is not clear from the ES (chapter 12 [APP-034]) how many properties would fall between the LOAEL and SOAEL, where significant adverse effects could be experienced. The methodology section of the ES explains that levels above the SOAEL will be significant for EIA purposes, and that levels between LOAEL and SOAEL will be evaluated against a list of considerations to determine the magnitude of significance of the effect under the EIA Regulations (paragraph 12.6.75 [APP-034]).

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		The assessment for aircraft noise reports, for impacts on dwellings in Year 20, that 13,046 dwellings are above the LOAEL and 115 dwellings above the SOAEL. At night time 16,465 dwellings are reported above the LOAEL and 225 dwellings above the SOAEL (Table 12.27 [APP-034]). **How have the dwellings between the LOAEL & SOAEL been assessed in terms of EIA significance?**
		Applicant's Response: The method for evaluating the significance of aviation noise at dwellings between the LOAEL and SOAEL in terms of EIA significance is described in paragraphs 12.6.27 to 12.6.30 and paragraphs 12.6.76 and 12.6.79 of the ES [APP-034]. The assessment of EIA significance at dwellings between the LOAEL and SOAEL is set out in paragraphs 12.7.64 to 12.7.72 and Table 12.29 of the ES [APP-034].
Ns.1.14	The Applicant CAA	**Noise modelling** Paragraph 9.86 of the Planning Statement [APP-080] states: *"The noise assessment has been prepared **without exact details relating to airspace options**[11], operating principles and aircraft flight paths. These will be formalised through an Airspace Change Proposal (ACP) which is a separate consenting regime that will happen after any DCO is granted for the Proposed Development. The ACP will be submitted through the Civil Aviation Authority's (CAA) airspace change process and the potential noise effects will be assessed again at that time following the CAA guidance within the Civil Aviation Publications (CAP). The ACP will therefore provide opportunities for communities to engage on future airspace options through an extensive consultation process as well as the preparation of a separate Environmental Statement to accompany the ACP."*

[11] ExA emphasis

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		Could any Airspace Change Proposal (ACP) give rise to a scenario which has not been assessed in the Applicant's ES [APP-033 to 036]?
		Applicant's Response: The Airspace Change Proposal (ACP) could not give rise to a scenario which has not been assessed in the ES. As agreed in the CAA/PINS Process Workshop held in June 2017, the Applicant in its ES provided the 'worst credible' aircraft flight paths with regard to the environmental impact of approach and departure operations. The CAA would be looking for the 'best possible' flightpaths to be proposed in considering an environmental assessment in its decision-making process. The Applicant would therefore not submit a proposal to the CAA which is outside the assessment in the ES. Paragraph 12.2.2 of the ES incorrectly lists the CAA as a respondent to the Scoping Report consultation. In fact, the CAA did not provide a response to the Scoping Report. The CAA was consulted on a number of occasions outside of the scoping process (details of the meeting dates and issues discussed are provided at Appendix Ns.1.11 in TR020002/D3/FWQ/Appendices). However, within the CAP1616 requirement (Annex B) entails the consideration and assessment (qualitative and where possible quantitative) of environmental impacts that can arise from ACPs, notably noise, CO_2 emissions and local air quality and the presentation and explanation of those impacts to stakeholders. The inclusion of environmental impacts (assessment and report) forms part of the CAA's decision-making process for airspace changes. Furthermore, Section 70 (2)(d) of the Transport Act 2000 states that the CAA must "take account of any guidance on environmental objectives given to the CAA by the Secretary of State after the coming into force of this section" when making decisions on airspace change proposals. The guidance from the Secretary of State on environmental objectives is the Air Navigation Guidance 2017.47 It applies to the whole of the UK.
Ns.1.15	The Applicant	**Demolition**

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		ES figure 12.3a [APP-042] sets out the construction noise assessment phasing assumptions. These show demolition of the terminal in construction phase 2 whereas ES paragraph 3.3.44 [APP-033] states that demolition will occur in phase 1. **i. Confirm whether demolition of the terminal is scheduled for phase 1 or phase 2 of construction.** **ii. In confirming the demolition phasing, also confirm to what extent this alters the conclusions reached in the assessment of construction noise within the ES.**
		Applicant's Response: i. Demolition of the existing terminal will take place in phase 1. ii. The scheduling of demolition of the terminal in Phase 1 does not alter the conclusions of the construction noise assessment.
Ns.1.16	The Applicant	**Baseline data** The baseline data presented in ES Table 12.2 [APP-034]; Appendix 12.4 baseline survey data and Appendix 12.4, Table A12.4.8 appear to differ by 1-2dB [APP-057]. These apparent discrepancies relate to day, evening and night time noise data sets. **Can the Applicant explain the apparent discrepancies and the implications of the different noise values for the assessment of likely significant effects?**
		Applicant's Response:

Ref No.	Respondent	Question
		The Applicant has identified typographical errors in ES table A12.4.8 and for one survey location (LT1) in Appendix 12.4. The baseline levels in ES table 12.2 have been checked and accurately reflect the recorded survey data. Any significance conclusions based on baseline noise data have been checked for consistency against the baseline data and are robust.
Ns.1.17	The Applicant	**Road traffic noise** TA Volume 17, Appendix E, Table 1.7 [APP-063] suggests that there will be a peak in passenger traffic to the airport between 03:00-06:00. **Since the $L_{A10,18hour}$ metric used in CRTN accounts for traffic flows between 06:00 – 24:00, confirm how road traffic noise has been accounted for in the noise assessment before 06:00.**
		Applicant's Response: An assessment of night time road traffic noise was not presented in the ES as noise was screened out of the assessment based on traffic data available for the ES. The Transport Assessment is being revised using Kent County Council's model, hence revised noise assessments, including a night time noise assessment, will be provided at Deadline 4.
Ns.1.18	The Applicant	**Traffic and aircraft noise** Aircraft and traffic noise are assessed separately. It is not immediately apparent how the assessment of noise effects has taken into account combined noise emissions from increased road traffic, airport ground noise and aviation noise on relevant receptors. **Explain the extent to which and how this has been assessed.**

Ref No.	Respondent	Question
		Applicant's Response: As set out in paragraphs 12.6.15 to 12.6.17 of the ES [APP-34] the assessment of significance of aviation noise considers the combined effects of aircraft air noise and airside ground noise by combining the noise exposure from all sources. Paragraphs 12.7.73 to 12.7.77 and Table 12.30 present the assessment of indirect effects of road traffic noise. The assessment demonstrates that there will be a negligible increase in traffic noise on all roads where the development is expected to result in a change in road traffic volumes. This means that it is unlikely that the road traffic noise will contribute to a combined noise effect in combination with noise from other sources.
Ns.1.19	The CAA	**Noise methodology** ES Section 12.1 and ES Table 12.1 describe limitations and assumptions used in the preparation of the ES [APP-034]. The key assumptions are: • Application of professional judgement used to determine the likely equipment, working methods and times during construction; • Precise airspace arrangements are subject to the Airspace Change Process and are based on prototype arrangements that consider both overfly populations/avoid populations options; • Aircraft in future are assumed to be as noisy as today (although a trend of reducing noise is likely); and • The operational aircraft noise assessment uses an average winter's day rather than an average summer's day on the basis that due to importation of perishable vegetables, the largest increase in ATMs is likely to be during the winter months. The CAA CAP1616a document states that an average summer's day should be used as the basis for assessments of noise.

Ref No.	Respondent	Question
		i. Does the CAA consider that the assessment of average winter's day aircraft noise is representative of the proposed airport operations? **ii. Is an average summer's day assessment also required?**
		Applicant's Response: N/A
Ns.1.20	The Applicant	**ES Appendix 12.3 – Noise methodology [APP-057]** ES Appendix 12.1[APP-057] response to PINS comments states that air noise modelling for the ES has been undertaken using Aviation Environmental Design Tool (AEDT). ES Appendix 12.3.1[APP-057] in the 'modelling overview' states that LimA has been used for ground-based noise source modelling and that AEDT v2d and Integrated Noise Model (INM) v7.0 have been used for aircraft air noise modelling. ES Appendix 12.3.'Choices of noise model' states that INM v7.0 modelling has been undertaken and that AEDT has not been used because at the point in time when options appraisal and work for the PEIR commenced early versions of AEDT were not endorsed for use in the UK. ES paragraph 12.6.17[APP-034] states that the INM rather than the AEDT has been used to model noise and that this approach is consistent with the approach set out in CAP1616a. There are inconsistencies in the ES notably: • Appendix 12.1 response to PINS comments; • ES Appendix 12.3.1 modelling overview; • ES Appendix 12.3 choices of noise model and

Ref No.	Respondent	Question
		• ES paragraph 12.6.17 regarding the description of the modelling approach taken. **i. Confirm whether AEDT modelling has been undertaken and is the information used to inform the assessment.** **ii. If not, provide further justification for the use of INM modelling. Any justification should provide commentary on the outcomes of historic INM modelling in drawing conclusions regarding noise impacts.**
		Applicant's Response: i. The Applicant can confirm that AEDT has not been used for modelling outputs presented within the ES. All modelling outputs presented within the ES use INM 7.0d. INM is used at many airports in the UK. ii. In addition to describing the model used for the aircraft noise assessment ES Appendix 12.3.'Choices of noise model' [APP-057] confirms that: a. AEDT "gives similar if not identical results to INM 7.0d"; and b. all commercially available aviation noise models (AEDT, ANCON and INM) must conform to standards for aircraft noise prediction produced by the ICAO, European Civil Aviation Conference (ECAC) and Society of Automotive Engineers (SAE), namely SAE-AIR-1845 (1986)6 and ECAC Doc.29 (2016). INM was first used for assessing aircraft noise for the Proposed Development in 2016 to define the extent of Category 3 land referencing interests and consultation areas as well as to consider mitigation measures such as flight paths and displaced thresholds. Paragraph 1.19 of CAP1616a Airspace design: Environmental requirements technical annex states that "For consistency and comparison purposes, if a noise model is already in use at an airport, the same model should be used for the assessment of any airspace change proposal related to that airport." In this case, given the comparable results likely to be derived from INM and AEDT it was not considered necessary to adopt a new model at the point where the assessment itself was completed.

Ref No.	Respondent	Question
Ns.1.21	The Applicant	**Meteorological data** When discussing average meteorological conditions, ES Appendix 12.3 [APP-057] states that INM standard settings were appropriate. **With reference to historic meteorological data, explain why INM standard settings are appropriate to represent meteorological conditions at the site.**
		Applicant's Response: According to ECAC. Doc 29 '*Report on Standard Method of Computing Noise Contours around Civil Airports*', 4th ed, vol. 2, 2016, the standard INM reference conditions are widely used for airport noise studies. The document states that these settings are appropriate when the average conditions are within the following envelope, which is the case for Manston Airport: • Air temperature less than 30 C • Product of air temperature (C) and relative humidity (percent) greater than 500 • Wind speed less than 8 m/s (15 knots)
Ns.1.22	The Applicant	**Construction noise** ES Appendix 12.3, Tables A12.3.27 - A12.3.28[APP-057] include 5-10dB reductions for local screening or site mitigation for some or all construction works. The anticipated reduction which is resultant from this action is not made explicit in the construction noise assessment eg. ES Tables 12.16 – 25 and ES section 12.5 [APP-034] suggest that up to 5dB reduction may be achieved. **i. Provide clarification of this point.**

Ref No.	Respondent	Question
		ii. Provide construction noise assessment tables which set out precisely where 5 or 10 dB reductions are anticipated to be achieved and with reference to the specific mitigation necessary to secure this reduction.
		Applicant's Response: i. Screening of construction noise has been incorporated into the assessment according to the guidance set out in *BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites - Part 1: Noise*. In the assessment of construction noise: a. No screening of construction noise was incorporated in situations where works were undertaken in direct line of sight of sensitive receptors; b. 5 dB ("partial screening" as defined in BS5228) was incorporated in the predictions where construction works would be partially screened by existing barriers or site hoardings, for example when there is a large separation distance between the receptor / source and screen / hoarding c. 10dB ("full screening" as defined in BS5228) was incorporated in the predictions where construction works would be fully screened by existing or new buildings, barriers or site hoardings. For example when barriers are located close to the source of noise or there is a building separating the construction works from the receptors ii. The revised construction table is provided at Appendix Ns.1.22 in TR020002/D3/FWQ/Appendices
Ns.1.23	The Applicant	**Multiple noise construction activities** ES Appendix 12.3, Tables 12.3.31-33[APP-057] and ES Tables 12.16 to 12.24[APP-034] consider the individual effect of the loudest activity rather than the combined effect of multiple activities on a single receptor. **Confirm what the combined impact of noise from different construction sound sources is for the assessed receptors.**

Ref No.	Respondent	Question
		Applicant's Response: As stated in paragraph 12.7.11 of the ES, construction noise predictions for each activity presented in ES Tables 12.16 to 12.24 [APP-034] present worst-case noise levels for each activity in that the expected noise levels are predicted for one month when plant and equipment is located in the part of the work site closest to the receptor. Noise levels could potentially be substantially lower on other days where the works are not as intense and as construction processes move progressively around the site. Given the duration of each construction phase and the size of the site it is considered that the results presented are representative of the combined impact because the combined impact at any one location would be the level from the nearest source. The noise levels provided in the ES therefore provide a robust and realistic worst-case assessment of the highest noise exposure at sensitive receptors within the vicinity of the works.
Ns.1.24	The Applicant CAA Independent Commission on Civil Aviation Noise (ICCAN)	**Airspace Change Process [APP-086]** ES Appendix 12.3[APP-057] discusses the potential noise effects relating to different aircraft flightpaths and selects a probable route that has been subject to assessment. The ES [APP-034] acknowledges that the flight path may be subject to change since it is subject to approval through the Airspace Change Process. **i. Can the Applicant provide commentary on any progress made in relation to the airspace change process and the confirmation of specific flight paths for Manston Airport?** **ii. The Airspace Change Process is discussed in Section 6 of [APP-086]. What is the Applicant's understanding of the role of ICCAN in this process?**
		Applicant's Response: i. The Applicant has submitted a Statement of Need (SoN) for the Airspace Change Process (ACP) to the CAA which identifies the requirement for appropriate airspace and approach and departure Instrument Flight Procedures (IFPs) which

Ref No.	Respondent	Question
		will be designed within the swathes and assessed as part of air space change. The Applicant is awaiting the allocation of a Case Officer and an initial assessment meeting with the CAA Safety and Airspace Regulation Group (SARG) to provide a provisional indication of the appropriate scaling level of the proposal, in accordance with CAP 1616, *Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*. ii. ICCAN will become the independent UK body responsible for creating, compiling and disseminating best practice to the aviation industry on the management of civil aviation noise and advising government in this area. The Secretary of State's Air Navigation Guidance 2017 requires the CAA, in exercising its air navigation functions, also to take account of any best-practice guidance which ICCAN may publish on aspects of aviation noise. The CAA expects change sponsors, in this case the Applicant, to be mindful of ICCAN's role and guidance throughout the airspace change process and ICCAN will be involved with ACPs at various points within the process alongside producing best-practice guidance on all aspects of aviation noise. ICCAN will develop and maintain best practice guidance on aviation noise for participants in the airspace change process. This guidance should be considered by the change sponsor, and if a sponsor deviates from ICCAN guidance it should explain why. The CAA will review how the change sponsor has demonstrated that it has considered any relevant best practice from ICCAN in developing the ACP, and the CAA will factor relevant best-practice considerations into its report for consideration by the CAA decision-maker. Within the airspace change process, ICCAN's role is to: a. provide best-practice guidance on the best noise management techniques; and b. provide best-practice guidance on the accessibility of noise information.
Ns.1.25	The Applicant	**Airport car parking** The list of sound source data in ES Appendix 12.3[APP-057] excludes airport car parking. **Confirm how airport car parking noise has been assessed.**

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		Applicant's Response: Noise from the car park was originally only considered as a reflection of the traffic model which adopted a single point of entry to the road network with the resultant link flow changes included in the noise assessment. It was carried out in this way as the car park is relatively distant from potentially effected receptors and movements within the car park are slow and as such do not generate noise levels warranting further assessment. Nonetheless, an assessment has now been carried out which supports the earlier decision to omit the car park from further assessment. This assessment has now been carried out and demonstrates that parking noise will be significantly below the ambient noise levels at the nearest sensitive receptors and as such does not need to be included in the combined noise model. The results of the assessment are shown in Appendix Ns.1.25 in TR020002/D3/FWQ/Appendices.
Ns.1.26	The Applicant	**Engine ground running** ES Appendix 12.3 [APP-057] 'engine ground running' states that the most suitable location for performing Engine Ground Runs is 50m east of the runway centre no more than 50 times/year and lasting 10 minutes. The 'embedded mitigation' section of the appendix also states that the modelling assumes no runs will take place between 23.00-07.00. ES appendix 12.3 states that no engine ground runs will take place between 23.00 and 07.00 and uses this as a modelling assumption. However, Section6 of the noise mitigation plan [APP-009] states that open field testing may be carried out 'where operationally urgent and carried out within a designated test area'. **i. Confirm which of these statements is correct.** **ii. Where night-time provision for engine ground runs is sought, confirm how this would affect the forecast LAeq,8hr.**

Ref No.	Respondent	Question
		Applicant's Response: i. The statement in ES Appendix 12.3 is correct and the updated Noise Mitigation Plan submitted for Deadline 3 [TR020002/D3/2.4] has been amended such that there will be an absolute prohibition on night time open field testing. ii. Not applicable given the answer to i) above.
Ns.1.27	The Applicant	**Noise Mitigation Plan (APP-009]** The noise mitigation plan states that runway preferences for take-off on runway 28 and landing on runway 10 to avoid overflying Ramsgate, although the ES [APP-034] recognises that such operations will be prevented at higher volumes of air traffic movements. **Confirm how many ATMs day/night will prevent such operation and the likely year of change of operation.**
		Applicant's Response: The Applicant has made a study into this mode of operation using the planned physical taxiway and runway configuration shown within the ES. The study indicates that the cargo / airliner ATM rate would need to be more than 5 per hour, a frequency not expected at full operation and above the ATM cap that is now being proposed.
Ns.1.28	The Applicant	**Noise control and quota counts** **Provide details of other noise control measures, including quota counts established at other UK airports of comparable size/aircraft composition to provide context for the proposed mitigation plan (APP-009].**

Ref No.	Respondent	Question
		Applicant's Response: The best source of details about noise control measures at other UK airports are either their web site (which may set out their noise management and compensation policies), airport Masterplans or airport Noise Action Plans. The latter are a legal requirement under European Union Directive 2002/49/EC for airports with over 50,000 aircraft movements pa or which are in close proximity to densely built up areas with over 100,000 population. The Directive was transposed by the UK Government in the Environmental Noise (England) Regulations 2006. In 2013 DEFRA produced Guidance for Airport Operators to produce noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended) Airports designated by the Secretary of State for noise purposes (i.e. Heathrow, Gatwick and Stansted) are too large to offer a sensible comparison with the anticipated scale of development at Manston, as are other larger airports required to produce noise action plans e.g. Manchester, Luton, Birmingham and Edinburgh and Glasgow. Airports in the UK that are closest in terms of equivalence to the scale and nature of operations envisaged at Manston (i.e. aircraft mix - pax traffic of up to 2-3m and freighter dominated cargo operations), some night time operations and a relatively small population within key daytime and night-time noise contours are: - Early stage of Manston (MSE) development: Prestwick, Doncaster Sheffield and Aberdeen - More mature stage of MSE development: East Midlands <u>Prestwick (PIK)</u> PIK has no night time restrictions and there is no sign of even a local agreement offering controls. <u>Doncaster Sheffield (DSA)</u> DSA has not prepared a Noise Action Plan (it does not meet the criteria requiring it to do so), but it does monitor noise and report monthly on it to Doncaster Metropolitan Borough Council and the Airport Consultative Committee and has committed

Ref No.	Respondent	Question
		to a Quiet Operations Policy covering operational measures such as the design and regulation of arrival and departure routes, preferential runway usage, minimisation of reverse thrust on landing and a night noise budget. The latter limits the noisiest aircraft types at Night and is subject to a Quota Count system. DSA also operates a voluntary Sound Insulation Grant Scheme providing residents with financial assistance towards the installation of sound proof glazing. The scheme has so far been extended to 247 properties. <u>Aberdeen</u> However, Aberdeen, which currently has a passenger throughput of 3pm, a significant oil focused helicopter operation taking it over 50,000 ATMs, some of which of necessity operate at night, does have a Noise Action Plan which contains a package of measures designed to minimise and mitigate the effects of aircraft noise. This includes control measures such as: • a noise insulation scheme. Following a public consultation exercise carried out during 2010, the airport will continue to support noise insulation measures for residential properties within the 66 decibel contour area. • adopting strict DfT imposed day and night-time noise restrictions, which are legally required at larger airports such as Heathrow, on a voluntary basis by AIAL. • Noisier 'Chapter 2 aircraft' have been banned • for a number of years from landing at Aberdeen and the imposition of differential landing charges encourage airlines to operate quieter aircraft types. <u>East Midlands</u>

Ref No.	Respondent	Question
		Noise control measures are set in the East Midland Sustainable Development Plan (2015) and a very thorough Night Noise Action Plan covering the period 2019-23. The latter includes the following objectives and discusses a range of measures to help deliver them: - Encourage and incentivise the use of quieter aircraft and; - Optimise aircraft operating procedures at the airport to minimise noise and; - Work with local planning authorities to discourage new noise sensitive development in areas affected by aircraft noise and; - Continually improve how we work in collaboration with communities, regulators and industry partners to explore options to reduce noise from aircraft operations. There is also a commitment to ensure Chapter 4 compliant aircraft for night time movements as soon as possible, manage aircraft using the airport according to their QC count (especially at night) and to stay within the existing night noise envelope. The conclusions we draw based on these comparators, is that when the airport re-opens the requirement for significant noise controls will be small, but that above [agreed] thresholds, and once the airport has again become a statutory undertaker, then increasingly sophisticated control mechanisms will be required and that the best mechanism for achieving this is the commitment to produce a Night Noise Plan as part of the conditions to the DCO approval.
Ns.1.29	The Applicant	**Noise Mitigation Plan (APP-009]** Section 3 of the Plan states:

Ref No.	Respondent	Question
		*"The airport operator will provide **reasonable levels of noise insulation and ventilation**[12] for schools and community buildings within the 60 dB LAeq (16 hour) day time contour."* **Specify what is meant by reasonable in this context.**

		Applicant's Response:
		
		"reasonable" in this context means:
		
		• Taking account of the existing building structure:
		  o a level of insulation and ventilation designed to achieve acoustic conditions inside classrooms consistent with BB93: acoustic design of schools – performance standards; or
		  o where existing conditions already exceed acoustic conditions defined in BB93, a level of insulation and ventilation designed to maintain existing acoustic conditions inside classrooms
		• Alternative ventilation which avoids overheating in classrooms.

Ns.1.30	The Applicant	**Noise Mitigation Plan (APP-009]** The mitigation provisions relating to noise insulation and relocation in sections 2 and 4 are subject to eligibility criteria, which are briefly described in the noise mitigation plan. **Provide further details regarding the eligibility criteria and who would be responsible for administering any mitigation payments.**
		Applicant's Response:

[12] ExA emphasis

Ref No.	Respondent	Question
		Section 2 of the Noise Mitigation Plan [APP-009] sets out the proposed Noise Insulation Scheme that would be operated by the airport indicating both daytime and night-time eligibility contours. The scheme will be operated in a similar way to that at East Midlands Airport, which can be found at Appendix Ns.1.30 in TR020002/D3/FWQ/Appendices. Further information will be included within the updated Noise Mitigation Plan expected to be provided at Deadline 4.
Ns.1.31	The Applicant	**Noise Mitigation Plan (APP-009]** Section 14 of the noise mitigation plan limits the spending of community trust fund monies to the 50dB $L_{Aeq,16hr}$ and 40dB $L_{Aeq,8hr}$ contours. **Explain why a wider area of effect such as the extent of the relevant L_{ASmax} contours has not been adopted.**
		Applicant's Response: The extent of the community trust fund has been set to reflect those receptors that may be adversely affected by aircraft noise. That is at the threshold consistent with the Daytime and Night Time LOAELS adopted for the assessment of effects. The extent of the LASmax contours is not part of the assessment of adverse effects. As shown in the Planning Practice Guidance on Noise, the fact that a sound can be heard does not mean that it has an adverse effect.
Ns.1.32	The Applicant	**Caravan parks and camping sites (APP-034]** Paragraph 11.4.32 of the ES [APP-034] states: *"The Kent coast and the towns of Broadstairs, Margate and Ramsgate are popular tourist destinations resulting in numerous campsites, caravan site and holiday parks within the study area. It is likely that a proportion of the caravan sites are used for permanent residences as opposed to holiday lets. These are set out in **Table 11.9** and the locations of those carried through to the Visual Assessment are shown in **Figure 11.35."***

Ref No.	Respondent	Question
		Paragraph 9.282 of the Planning Statement [APP-080] states: *"The community of Manston, particularly in the area of Preston Road, Manston; in northern section of High Street, Manston; in southern section of High Street; Manston; Jubilee Cottages on Manston Road; PRoWs TR8, TR9, TR10 and TR22; Manston Court Caravan Site and Preston Parks are likely to experience significant daytime inter-related noise and visual effects in relation to visitor arrival and departure and any outdoor exhibits during the operational phase of the Proposed Development.* *The community of Manston may also experience significant inter-related noise and visual effects during the daytime, in both shared open spaces and indoor spaces (specifically residential properties at Preston Road, Manston; in northern section of High Street, Manston; in southern section of High Street; Manston; Jubilee Cottages on Manston Road; PRoWs TR8, TR9, TR10 and TR22; and Manston Court Caravan Site and Preston Parks). Effects on some indoor spaces are less likely to be significant if eligible residents take up the noise insulation scheme,* ***however this scheme will not apply to caravan sites[13]."*** **i. What proportion of the caravan sites are used as permanent residences?** **ii. How have these caravan sites been assessed in the noise and vibration assessment?** **iii. How many permanent residences in Manston Court and Preston Parks will be significantly affected by inter-related noise and visual effects?** **iv. How does the Applicant propose to mitigate these significant effects?**
		Applicant's Response:

[13] ExA emphasis

Ref No.	Respondent	Question
		i. Based on liability to pay council tax, we understand that no caravans in Manston Court and only one in Preston Parks are permanent residences. ii. The caravan sites have been assessed as permanent residential dwellings in the noise and vibration assessment. iii. The reference to significant inter-related noise and visual effects in Chapter 18 of the ES and hence paragraph 9.282 of the Planning Statement is an error. iv. No further mitigation is proposed as there are no significant inter-related noise and visual effects in Manston Court and Preston Parks.
Ns.1.33	The Applicant CAA	**ES Noise contour maps (APP-042]** Section 15 of the noise management plan [APP-009] states that the LAeq,16hr and $L_{Aeq,8hr}$ are based on the average summer**'s** day/night respectively. ES paragraph 12.7.44 [APP-034] makes it clear that the worst case is considered to be a typical busy day during winter time. **Can the Applicant confirm:** **i. Whether the ES noise contour maps are based on the winter or summer day; and** **ii. whether the Category 3 interests have been identified based on the average summer's day or average winter's day scenarios?**
		Applicant's Response: i. The Applicant can confirm that the ES noise contour maps are based on the average winter's day.

Ref No.	Respondent	Question
		ii. The Applicant can confirm that the Category 3 interests are based on the average winter's day.
Ns.1.34	The Applicant	**Register of Environmental Actions and Commitments (APP-010]** **Confirm whether the Register of Environmental Actions and Commitments should include an entry regarding operational noise impacts on human receptors.**
		Applicant's Response: The Applicant confirms that a revised Register of Environmental Actions and Commitments (REAC) will be submitted at Deadline 4 and will include an entry regarding operational noise impacts on human receptors. These impacts are addressed in the Construction Environmental Management Plan [APP-011] and are the subject of mitigation in the Noise Mitigation Plan [APP-009], both of which are referred to in the REAC.
Ns.1.35	The Applicant	**Take-offs Runway 28/Landing Runway 10** **Based on historic monitoring data and previous airport usage, confirm how probable the proposed runway preferences identified in the noise mitigation plan (APP-009] are for take-offs on runway 28/landing on runway 10.**
		Applicant's Response: When weather conditions allow, and taking into account other operational and safety considerations including runway utilisation, the Applicant, then Airport operator / owner, will seek to operate take-offs from Runway 28 and landings on Runway 10 subject to such operations being in accordance with CAA guidance and the aircraft operator's own limitations and safety management systems.

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		The Applicant has made a study into the use of the above 'Preferential Runway Strategy'; however this will not always be achievable due to prevailing wind and runway conditions. The results of the study were sensitive to rain fall and changes in wind direction. However, the study shows that around 70% of landings could be made to Runway 10 and that up to 80% of take offs could be made from Runway 28. The anticipated capability to use 'Preferential Runway Strategy' is due mainly to improved aircraft performance and regulatory changes, but the recognition that historically previous Manston Airport owners or operators had neither considered a 'Preferential Runway Strategy' nor planned for this type of operation when the actual weather, and forecasts, allowed. The navigational equipment (instrument landing system (ILS)) that existed previously was only of category 1 precision and, in the case of runway 10, lacked a glide path indicator. The development plan for the airport includes the installation of full category 3 ILS on both runways. The comparative lack of precision coupled with the absence of a glide path indicator on runway 10 meant that the aircraft had to rely on visual methods to perform a landing; thus landing on runway 10 required good visibility and consequently 28 was the preferred landing runway in many cases of less than good visibility (such as rain). At busy airports, switching from one runway direction to the other causes delays and is therefore discouraged. However, at current forecast Manston Air Traffic Movements (ATM), an average of less than 3 movements (a landing and a take-off) per hour will take place. This allows for judicious runway switching and utilisation without requiring delays or holding circuits.
Ns.1.36	The Applicant	**N60dbLsmax (APP-042]** The ES provides N60 contours for night time noise in Figures 12.12 and 12.13 [APP-042]. **In line with the requirements of the Air Navigation Guidance 2017 – paragraph 3.11 in reference 7 of Chapter 12 of ES (APP-034], confirm whether N65 daytime contour maps have been prepared for the Proposed Development.**
		Applicant's Response:

Ref No.	Respondent	Question
		N65 daytime contours were not originally prepared for the Proposed Development. N65 contours are supplementary indicators which may be used to describe the nature of a noise impact, they are not necessary for identifying significant effects in accordance with government noise policy or EIA significance. We will provide these noise contours at Deadline 4.
Ns.1.37	The Applicant	**Cumulative noise effects from operational noise sources** Paragraph 9.93 of the Planning Statement [APP-080] states: *"The potential noise effects that have been assessed are as follows:* *[...]* • *Noise from aircraft and airport operations including from aircraft in the air and noise from aircraft operations on the ground, associated Ground Support Equipment, airfield activities and airport buildings during operation of the Proposed Development;* • *Changes in surface access noise, namely road traffic noise from vehicle movements associated with the operation of the Proposed Development; and* • *Noise from the secondary business infrastructure located within the Northern Grass area."* Figures 12.4-12.12 [APP-042] only provide noise contours for aircraft noise. **Have noise contours been produced separately for operational road traffic and secondary business infrastructure? If not can they be provided?**
		Applicant's Response: Operational road traffic noise contours have not been produced for road traffic noise. Paragraphs 12.7.73 to 12.7.77 and Table 12.30 of the ES [APP-034] present the assessment of indirect effects of road traffic noise. The assessment demonstrates that there will be a negligible increase in road noise on all roads where the development is expected to result

Ref No.	Respondent	Question
		in a change in road traffic volumes. Noise contours have been used for over 50 years to assess the impact of aircraft noise. Noise contours are less useful for ground base sources (other than for large geographical scale noise mapping). It is much more relevant to look at the noise impact at representative locations as has been done in the ES. A robust assessment of the effects of noise from road traffic has therefore been undertaken without a requirement for noise contours. Noise contours have not been produced for the secondary business infrastructure. As set out in paragraph 12.7.78 of the ES, noise impacts from the secondary business infrastructure has been assessed qualitatively because the precise layout, occupiers, activities and plant and equipment that will be operated in this area is unknown at this stage. Noise contours therefore cannot be provided for the secondary business infrastructure.
Ns.1.38	The Applicant	**Significant permanent community operational aircraft noise effects [APP-034]** Section 12.8 of the ES[APP-034] states: *"**Aircraft noise – permanent community effects – daytime*** *Significant In the following communities, aircraft noise would increase to the point where there would be a perceived change in quality of life for occupants of buildings in these communities or a perceived change in the acoustic character of shared open spaces within these communities:* • *Ramsgate;* • *Pegwell Bay; and* • *Manston.* ***Aircraft noise – permanent community effects – nighttime***

Ref No.	Respondent	Question
		Significant In the following communities, aircraft noise would increase to the point where there would be a perceived change in quality of life for occupants of buildings in these communities or a perceived change in the acoustic character of shared open spaces within these communities: • *Ramsgate;* • *Manston;* • *Wade; and* • *West Stourmouth."* **Are the 115 properties expected to be exposed to noise levels above the daytime SOAEL of 63 dB $_{LAeq,16hr;}$ up to eight properties[14] expected to be exposed to noise levels above the daytime UAEL of 69 dB $_{LAeq,16hr;}$ and the 225 properties expected to be exposed to noise levels above the night time SOAEL of 55 dB $_{LAeq,8hr}$ included in the above permanent community effects daytime and night time?**
		Applicant's Response: Yes. In respect of the footnote to this question, the Planning Statement is incorrect, the correct number is eight.
OP.1 Operational Issues		
OP.1.1	The Applicant	**Take-offs Runway 28/Landing Runway 10** **Based on historic monitoring data and previous airport usage, confirm how probable the proposed runway preferences identified in the noise mitigation plan (APP-009] are for take-offs on runway 28/landing on runway 10.**

[14] At paragraph 9.94 of the Planning Statement [APP-080] states there are ten properties?

Ref No.	Respondent	Question
		Applicant's Response: When weather conditions allow, and taking into account other operational and safety considerations including runway utilisation, the Applicant, then Airport operator / owner, will seek to operate take-offs from Runway 28 and landings on Runway 10 subject to such operations being in accordance with CAA guidance and the aircraft operator's own limitations and safety management systems. The Applicant has made a study into the use of the above 'Preferential Runway Strategy'; however this will not always be achievable due to prevailing wind and runway conditions. The results of the study were sensitive to rain fall and changes in wind direction. However, the study shows that around 70% of landings could be made to Runway 10 and that up to 80% of take offs could be made from Runway 28. The anticipated capability to use 'Preferential Runway Strategy' is due mainly to improved aircraft performance and regulatory changes, but the recognition that historically previous Manston Airport owners or operators had neither considered a 'Preferential Runway Strategy' nor planned for this type of operation when the actual weather, and forecasts, allowed. The navigational equipment (instrument landing system (ILS)) that existed previously was only of category 1 precision and, in the case of runway 10, lacked a glide path indicator. The development plan for the airport includes the installation of full category 3 ILS on both runways. The comparative lack of precision coupled with the absence of a glide path indicator on runway 10 meant that the aircraft had to rely on visual methods to perform a landing; thus landing on runway 10 required good visibility and consequently 28 was the preferred landing runway in many cases of less than good visibility (such as rain). At busy airports, switching from one runway direction to the other causes delays and is therefore discouraged. However, at current forecast Manston ATM, an average of less than 3 movements (a landing and a take-off) per hour will take place. This allows for judicious runway switching and utilisation without requiring delays or holding circuits.
OP.1.2	The Applicant	**N60dbLsmax (APP-042]**

Ref No.	Respondent	Question
		The ES provides N60 contours for night time noise in Figures 12.12 and 12.13 [APP-042]. **In line with the requirements of the Air Navigation Guidance 2017 – paragraph 3.11 in reference 7 of Chapter 12 of ES (APP-034], confirm whether N65 daytime contour maps have been prepared for the Proposed Development.**
		Applicant's Response: This is a duplication of question Ns.1.36 – please see response to that question.
OP.1.3	The Applicant Civil Aviation Authority (CAA) European Aviation Safety Agency (EASA)	**Aerodrome certificate** Box 1.1 of the Environment Statement [APP-033] states: *"The CAA is the statutory corporation which oversees and regulates, either directly or indirectly, all aspects of civil aviation in the UK; it is a public coorporation of the DfT. Any airport in the UK which is used for commercial passenger flights, public transport flights and/or flying training in aircraft above a specified weight, is required to obtain, from the CAA, an Aerodrome Licence.* *The EASA is an agency of the European Union (EU) with regulatory and executive tasks in the area of civilian aviation safety. Representatives from the member states national aviation authorities, such as the CAA, sit on the EASA's advisory bodies. From 31 December 2017 aerodromes in the UK which are open to public use and which serve commercial air transport, where operations using instrument approach or departure procedures are provided, and which have a paved runway of 800m or above, or exclusively serve helicopters, are required to comply with EASA regulations and obtain an EASA Certificate to replace their CAA Aerodrome Licence."* Paragraph 4.8 of the Consultation Report [APP-075] dated July 2018 states:

Ref No.	Respondent	Question
		"The process of obtaining these consents will run alongside the DCO application process and a decision on them will be made by the CAA rather than the Secretary of State." **What is the current status of this parallel application?**
		Applicant's Response: The Applicant has not yet commenced the CAA's regulatory process under the Civil Aviation Act 2012, although it has started the Airspace Change Process (ACP), having obtained a special permission to do so at an airport that is closed, to allow coordination with the DCO application. The start of the certification and licensing application is expected in the latter part of 2019. The Applicant has held a number of meetings (See Appendix Ns.1.11 in TR020002/D3/FWQ/Appendices) with the CAA, including the facilitation of a CAA/PINS Process Workshop, to ensure that the Aerodrome Certification process remains aligned with, and within the bounds of, the DCO submission. Based on guidance from the CAA, the application for an Aerodrome Certificate will not be submitted until all aspects of the operation have been identified; this is likely to be after the DCO decision has been made. However, work on building the extensive body of evidence required to support the submission has already begun. The Aerodrome Certificate application, in terms of the Airport's physical infrastructure, extent, concept of operation and management, to the CAA will remain within the bounds of the DCO submission.
OP.1.4	The Applicant	**Defence Industry Organisation Safeguarding (DIOS) [RR- 0442]** The Proposed Development occupies the statutory technical safeguarding consultation zone surrounding the Manston High Resolution Direction Finder (HRDF) and DIOS have consistently raised concerns to this application due to no successful mitigation being identified. The HRDF is a critical piece of technical equipment for the MOD it is used to precisely locate transmissions from aircraft and supports the delivery of air traffic control functions. The mast serves as an integral part of UK

Ref No.	Respondent	Question
		wide network (the UK Diversion and Distress Facility) which is used to locate aircraft or personnel and direct rescue emergency response capabilities for the management of air safety incidents. DIOS believe the application in its current form may cause a physical infringement to the operation of the asset. **What mitigation is the Applicant proposing for the HRDF?**
		Applicant's Response: The Applicant fully recognises the critical importance of this installation and has been engaging with the Defence Industry Organisation (DIO) on the topic since 3 January 2017. To ensure its continued availability, the Applicant commissioned a detailed safeguarding assessment of both the current installation and up to 5 alternative locations both on and off the airfield which it has shared with DIO. As a result the Applicant has identified an alternative location which, assessments indicate, would give at least the same level of capability provided by the current location. The Applicant has reached agreement with the landowner of a site it considers would be suitable to accommodate this facility. It is adjacent to the land which will accommodate the approach lights in respect of which the Applicant has a 25 year lease with the same landowner. Subject to DIO agreement, the Applicant proposes to secure an appropriate site (outside the subject development 'red line') and building and testing a new installation to the satisfaction of DIO, before the current installation is decommissioned. The Applicant's intention is to provide an equivalent level of capability, at no cost to DIO, and with no break in service. On 18 October 2018 the Applicant held a meeting with DIO staff, including safeguarding and legal representatives, to discuss the Applicant's proposals. It was agreed that there is now a need for a technical assessment of the proposed new location by a third party organisation (Aquila) on behalf of the MOD to confirm the level of capability that the new site would provide. The Applicant believes the new site to be acceptable and in some respects better than the current location (e.g. fewer nearby structures).
OP.1.5	The CAA	**Prototype routes**

Ref No.	Respondent	Question
		Paragraph 9.89 of the Planning Statement [APP-080] states: *"Prototype routes have been used for the assessment of aircraft noise, which have been developed around design principles, namely 'avoid overflying populations', 'overfly populations' and 'swathe centre line'. An options appraisal of these principles is presented in Appendix 12.3 of Chapter 12 of the ES [document reference TR020002/APP/5.2-12] which, demonstrates that the variation in the population adversely effected and significantly adversely effected by noise across the design principles is less than 1%, based on the operating conditions modelled. This process is both normal and unavoidable due to the separate consenting regimes. The assessment is therefore robust because it has considered the range of design outcomes which could occur following the completion of the ACP."* **i. What is the view of the CAA of the <1% calculation?** **ii. Does the CAA agree that the ES [APP-034] has considered the range of design outcomes that will be part of a future ACP application?** **iii. In CAA's experience, is it always necessary to seek an ACP following a planning consent application?**
		Applicant's Response: N/A
OP.1.6	The Applicant	**Night flights** Section 12.5.8 of Volume 2, Chapter 12 of the Environmental Statement [APP-034] proposes an annual quota count for night flights (23:00-07:00). **How is this value (3,028) calculated?**

Ref No.	Respondent	Question
		Applicant's Response: The proposed annual night-time quota count (QC) was calculated by applying established QC values to the aviation forecast used for the calculation of night-time aviation noise. The calculation is based on the representative fleet mix (ie. aircraft types) provided at ES Appendix 12.3 [APP-057], and an annualised number of night flights (6.7 per night over the course of one year). The proposed night-time QC is therefore consistent with the realistic worst-case scenario presented in the noise assessment.
OP.1.7	The Applicant	**Safety** **i. Do your forecasts indicate a date by when Public Safety Zones (PSZs) may need to be implemented?** **ii. If so, what provisions and modelling have been put in place for such an eventuality?** **iii. Would such PSZs affect any existing or consented residential properties?**
		Applicant's Response: i. The Applicant's forecasts do not indicate a date by when Public Safety Zones (PSZs) may need to be implemented. The Annex to the Department for Transport (DfT) Circular 01/2010 (Control of Development in Airport Public Safety Zones) dated 5 March 2010 [see Appendix OP.1.7 at TR020002/D3/FWQ/Appendices] states at paragraph 1: *Public Safety Zones are areas of land at the ends of the runways at the busiest airports, within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing*.

Ref No.	Respondent	Question
		Appendix A – Circular 01/2010 does not specifically define what constitutes the 'busiest airports' but it is understood that the DfT's current policy is that PSZs should be established at those airports which are shown to average more than 1,500 Air Traffic Movements (ATM) a month and are likely in due course to exceed 2,500 ATM's a month. Based on this understanding of the DfT's policy the threshold for establishment of a PSZ is 18,000 ATM's per year. This assessment is supported by evidence of the 32 UK airports which currently have a PSZ. Based on CAA Statistics [see Appendix OP.1.7 at TR020002/D3/FWQ/Appendices], with the exception of Doncaster Sheffield Airport which in 2017 had 17,435 movements (average 1,453 per month), all other airports that have PSZ averaged over 1,500 ATMs a month. Therefore, the Applicant, as the then operator / owner, would consider the introduction of a PSZ if movements were to exceed the 18,000 per year threshold. ii. To determine which airports should have PSZs, the DfT considers CAA Statistics [see Appendix OP.1.7] on ATM as well as risk-model analysis. National Air Traffic Services (NATS) are responsible (under contract to the DfT) for operating and designing the risk contours that predict the size and shape of PSZs. This is done using the DfT's risk contour model and is based on up-to-date worldwide accident data and data regarding operations supplied by the airport. As it is not yet clear when the threshold for a PSZ would be reached at Manston Airport and because the risk modelling requires the latest airport and worldwide accident data, the Applicant has no current plans for such modelling. However, should the threshold be reached, the Applicant, as the then operator / owner would engage with DfT to confirm the requirement and commission NATS to conduct the necessary risk modelling. iii. PSZs are areas of land at the end of runways established at the busiest airports in the UK, The area of a PSZ corresponds to the 1 in 100,000 individual risk contour for that airport; any person who lives within this risk contour for a period of a year, or has their normal place of work within this contour, has approximately a 1 in 100,000 chance per year of being killed as a result of an aircraft accident. This is the level at which the risk from aviation activity begins to merge with other non-aviation or 'background' risks. Compared to other risks we take every day, this is very low (the risk of being killed in a road accident is about 1 in 18,500; 5.4 times higher than the chance of being killed as a result of an aircraft accident).The size of a PSZ is subject to many factors, some of which (such as worldwide accident data) will change over time. Equally, the DfT risk model operated by NATS is a highly complex series of algorithms and calculations. It is therefore very difficult to say definitively at

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		this stage whether a future PSZ would impact on existing or consented residential properties. Individual risk is generally defined in safety literature as the risk of death per year to a representative or specified individual as the result of the realisation of specific hazards. For airport Third Party Risk (TPR) assessment the risk considered is death as a direct result of an aircraft crash. Individual risk at a particular location in the vicinity of an airport is assessed for a nominal individual who is assumed to reside at that location for 24 hours a day, every day of the year. This clearly results in an overestimate of the risk actually experienced by a real individual although this approach is consistent with the methods used when assessing TPR from industrial activities. In order to calculate the individual risk at a given location near to an airport, 3 quantities are needed: • the annual statistical expectation that an aircraft crash occurs in the vicinity of the airport (crash frequency); • the probability, given that a crash has occurred, that it affects a particular location (crash location model); and • the size of the area likely to be damaged as a result of a particular crash and the proportion of people in this area likely to be killed (crash consequence model). The crash frequency at an airport is determined by the number of aircraft movements that occur and the crash rates of the aircraft types performing those movements. Crash rates are calculated for generic groups of aircraft dependent upon the type of operation they are undertaking. Crash location and crash consequence models are derived from analysis of historical crash data. The large aircraft specific model consists of four separate mathematical location probability distributions for different types of crashes: • landing overruns (including veer-offs) • landing crashes from flight • take-off overruns (including veer-offs) • take-off crashes from flight

Ref No.	Respondent	Question
		It should be noted that whilst every effort is made to ensure that the modelled scenarios are as representative of real life as is possible, risk modelling can never predict future ATM operations with 100% certainty. It is not unusual for a PSZ at one end of a runway to be generally a little larger than the PSZ at the other end due to frequency of use for take-off or landing. A 'Preferential Runway Strategy' will be used at Manston whereby the majority of flight departures will be to, and arrivals from, the west. PSZs tend to extend away from the runway (a region behind the runway's landing threshold), as an isosceles triangle with its base centred at the end of the runway and extending outwards centred on the extended runway centreline, decreasing in width with distance from the end of the runway., The triangle tapers with a slight concaved curve to meet the extended width of the runway at approximately one third of the overall triangular length from the base, The PSZ length for the major runways at London Heathrow, with forecast movements for 2022 of 740,000, averages 3 kilometres (km). The PSZ for Exeter Airport's runway are less than 2km at both ends for current movements of 15,000. The Applicant understands that it is very unlikely that the 1 in 100,000 contour at the end of runway 28 (to the west of the Airport) would affect any existing or consented residential properties but at the end of runway 10 impingement of the contour apex to the western edge of the domestic area of Ramsgate enclosed by the railway line and Manston Rd to the northwest and the A299 and A255 to the southeast (being less than 2km from the end of the Manson runway) cannot be discounted.
OP.1.8	The Applicant	**Should PSZs be required, are the effects of such zones considered within the ES?**
		Applicant's Response: The Applicant has not considered the effects of PSZs within the ES as it is a strategic planning issue that should be included as a constraint in any Local Plan. The Local Plan will be subject to a strategic environmental assessment which is the appropriate level at which to consider such issues. The dimensions of the PSZ would be subject to complex modelling by NATS using a risk model provided by DfT which takes into account up to date worldwide accident data and the latest operational data provided by the airport. The Applicant understands, from DfT Circular 01/2010 (Control of Development in

Ref No.	Respondent	Question
		Airport Public Safety Zones) paragraph 22 (see Appendix OP.1.7 at TR020002/D3/FWQ/Appendices), that responsibility would lie jointly between the Local Planning Authority and the Airport operator: *'Regional Spatial Strategies and Local Development Frameworks should include a policy stating that Public Safety Zones have been established for a particular airport and that there is a general presumption against most kinds of new development and against certain changes of use and extensions to existing properties within the Zones…*'
OP.1.9	The Applicant	**What would be the likely impact of safeguarding zones (for all obstacle limitation surfaces)?**
		Applicant's Response: The Applicant recognises that, as part of its responsibilities under the Aerodrome Certificate issued by the CAA on behalf of EASA, it would be required to maintain the integrity of the aerodrome's operations, its Instrument Flight Procedures (IFPs) and its Obstacle Limitation Surfaces (OLS) by ensuring they are safeguarded against any development that may impact upon their operation. The effect within the safeguarded zones is to limit the vertical and lateral extent of physical (commercial, technical or domestic) development if it were to have an adverse impact on operations. The Applicant, as the operator / owner would lodge a safeguarding plan / scheme with the Local Planning Authorities (LPA) which would act as an initial filter for planning consents in respect of which the Applicant would submit objections as necessary.
OP.1.10	The Applicant	**i. What would be the impact, if any, of safeguarding zones on future developments near the airport in terms of blight and** **ii. Would the consented Manston Green proposal be affected?**
		Applicant's Response:

Ref No.	Respondent	Question
		i. The Applicant anticipates that the 'safeguarding process' would only have an impact on future developments insofar that such developments would interfere with the safeguarding of zones which aims to limit the vertical and lateral extent of physical development if it were to have an adverse impact on operations. ii. The Manston Green development was included in the cumulative assessment in Chapter 18 of the Environmental Statement (APP-035). The significant cumulative effects from the Proposed Development and the Manston Green development are summarised in Table 18.8 of APP-035 and relate to cumulative visual effects and operational noise. The Applicant anticipates that the Manston Green development would not be affected by any safeguarding zone, save that further surrounding planned development, following opening of the Airport, might be restricted in physical dimension. However, the current planning consent for Manston Green requires allowance to be made for the future operation of Manston Airport (see Appendix OP.1.10 at TR020002/D3/FWQ/Appendices). These zones would only apply to future developments that will be seeking planning consent through the normal planning process once the Local Panning Authority has set the safeguarding zone, in consultation with the then Airport owner / operator following the opening of the Airport.
OP.1.11	The Applicant	**Air Traffic Movements (ATMs)** Table 3.1 of the Planning Statement [APP-080] provides a forecast passenger and freight movement numbers (2019 to 2039). This is derived from the Azimuth Report [APP-085]. The dDCO[APP-006] states in Schedule 1: *"**Work No.9** — The construction and rehabilitation of pavements for the creation of 19 Code E aircraft parking stands and associated pavement and infrastructure.* ***Work No.10** — The construction and rehabilitation of pavements for the creation of 3 Code C aircraft parking stands and associated pavement and infrastructure.*

Ref No.	Respondent	Question
		Work No.11 *— The construction and rehabilitation of pavements for the creation of 4 Code C aircraft parking stands and associated pavement and infrastructure."* **What is the "*physical capability*"[15] of Works Nos. 9,10 and 11 to handle freight and passenger ATMs/year?**
		Applicant's Response: The physical capability of Work No. 9, the 19 cargo stands, is as mentioned in the application, calculated as 83,220 ATMs a year. The physical capability of Work No. 10, the three recycling stands is calculated as 36 ATMs a year (each stand receiving one aircraft which takes a month to dismantle). The physical capability of Work No. 11, the four passenger stands, is calculated as 43,800 ATMs a year. This is based on each stand managing 15 incoming and outgoing flights between 0700 and 2300 with an hour's dwell time and 10 minutes between a flight leaving and the next one arriving. Given the concern expressed about this issue in relevant representations and by the Examining Authority through its questions, and since the Applicant does not expect the number of ATMs assessed in the ES to be exceeded, it is now adding an annual limit of ATMs equivalent to the number assessed in the ES, namely 17,170 cargo plus 9,298 passenger movements, i.e. 26,468 movements in total. This cap has been included in the revised Noise Mitigation Plan being submitted at Deadline 3. This total includes the movements generated by the 3 recycling stands but does not include general aviation movements. To put this into context, in 2017 Heathrow had 476,186 ATMs, 18 times as many, and the figure above would make Manston the 18th busiest airport in the UK, just above Jersey. It corresponds to an average of 73 ATMs a day.
OP.1.13A (NUMBER	The Applicant	At the Open Floor Hearing held on 10 January 2019, an Interested Party suggested a range of options to consider, including a displaced threshold for Runway 28 and the use of steeper glideslopes for the same runway.

[15] Paragraph 1.31 of [APP-080]

Ref No.	Respondent	Question
USED TWICE – 1.12 NOT USED)		**i. With reference to likely aircraft types and weights consider whether a displaced threshold for runway 28 could be utilised.** **ii. With reference to likely aircraft types and weights consider whether a steeper glideslope, such as used at London City Airport, could be utilised for runway 28.**
		Applicant's Response: i. The Applicant did consider whether a displaced threshold for runway 28 could be utilised and commissioned a detailed study into their use. The study was not included in the DCO submission as it contains sensitive information, however, it concluded that for each 100 metres (m) of 'displacement' towards the runway midpoint, the glide slope is only raised by 17 feet (ft) above a ground location beyond the runway. A 500m inset threshold therefore only results in an 86ft difference in aircraft height; any distance greater than a 500 m inset threshold would have a significant operational impact on Manston, precluding the use of aircraft types that are universally used in the cargo fleet. Typically an aircraft on a normal 3^{o} glide path at 2 nautical miles (nm) (3.2 kilometres km)) from the threshold is at around 600ft above the threshold level; a 500m inset threshold would only increase this to 686ft. As a result of the detrimental impact on the operational capabilities of the airport compared to the modest gain achieved, the option of a displaced threshold on runway 28 was discounted. ii. The Applicant did consider whether steeper glideslopes for runway 28 could be utilised and commissioned a detailed study into their use. Once again, the study was not included in the DCO submission as it contains highly sensitive information. However, it concluded that the International Civil Aviation Organisation (ICAO) PANS-OPS Doc 8168 is the guidance used for designing instrument approach procedures. The normal glide slope for civil aviation operations is between 3^{o} and 3.5^{o}, deviation from this guidance can only be authorised in the UK by the CAA. It further states: *"Glide path angles above 3.5° should be used in approach procedure design only for obstacle clearance purposes and must not be used as a means to introduce noise abatement procedures. Such procedures are non-standard and require a special approval".*

Ref No.	Respondent	Question
		The study considered steeper approach flight trails that had been conducted at Heathrow airport. The Heathrow trial was based on a 3.2 ^{o} approach which sees aircraft descend at 320 rather than 300 feet per mile; giving a difference of just 40 feet when 2 miles from touchdown. The study identified that the introduction of a steeper approach can affect how aircraft crews choose to fly the approach in terms of airspeed, flap and landing gear configuration and deceleration; these, in turn, could actually result in an increase in aircraft noise. These variations of aircraft configuration and flight profile can increase the frequency that missed approaches, or go-around procedures are flown and impact on the landing/departure rate for the runway as well as increasing fuel burn and CO_2 emissions. Not all operators, aircraft or captains, particularly of cargo types, will be capable of, or willing to, fly a steeper approach. There would therefore be a need to also retain a conventional 3° approach. This will result in some duplication of infrastructure as aerodrome lighting and markings will have to be provided for both approach angles. Finally, there would need to be a capability for mixed mode operations (both steeper and conventional approaches) which would reduce any benefits from having a steeper approach option. As a result of the need to duplicate airport infrastructure for potentially only a proportion of aircraft operating from the airport, compared to the modest gain achieved, the option of a steeper approaches to runway 28 was not pursued.
OP.1.13B (NUMBER USED TWICE – 1.12 NOT USED)	The Applicant	It is proposed to utilise Runway 10 for landing and take offs, for noise mitigation purposes. **i. With reference to wind speeds and directions at the airport, how often could such an approach be taken?** **ii. Such an approach to the use of the runway would restrict usage of the airport. At what flight levels would such an approach have to be re-considered?**
		Applicant's Response:

Ref No.	Respondent	Question
		i. The Applicant has made a study into the use of a 'Preferential Runway Strategy'. The preferred runway option for Manston Airport would be for aircraft to land on Runway 10 and take off from Runway 28 (aircraft landing from, and taking off to, the west); the most significant factor influencing this strategy will be the prevailing wind and runway conditions. The study shows that, based solely on UK prevailing winds, around 70% of landings could be made to Runway 10 and that up to 80% of take offs could be made from Runway 28. However, it must be noted that there are a range of additional operational and safety factors that must be taken into consideration when applying this strategy. ii. At busy airports, switching from one runway direction to the reciprocal is discouraged as this causes delays and increases the risk of human error in either air traffic control or an aircraft; it can therefore only be used during periods of low traffic intensity. Consideration must also be given to aircraft taxing out to, and away from, the runway so as their movements are deconflicted. The study into use of the Preferential Runway Strategy indicated that an ATM rate of more than 5 per movements per hour would restrict use of a 'Preferential Runway Strategy'.
OP.1.14	The Applicant	**Provide a figure showing expected approximate heights of aircraft departing/arriving at the airport at set distances from the runway ends (0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 km).**
		Applicant's Response: The Applicant has provided the information requested as a table rather than as a figure (drawing). This is because a figure could be open to misinterpretation and imply that final flightpaths have already been decided when this is the purpose of the CAA's Airspace Change Process. Equally, the ACP will identify the design principles on which Manston's specific flight profiles will be based. We have therefore provided information based on industry standard flight profiles. Table 1 shows the nominal height of aircraft, on a standard 3^{o} glide path, to land at the Runway threshold at the prescribed distances. Table 2 shows the nominal height of aircraft, on a normal 6^{o} (10%) climb away from the normal take off roll at the prescribed distances from the departure end threshold (the aircraft will be airborne before the departure threshold).

<table>
<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
<tr><td></td><td></td><td>
The threshold elevations are Runway 10 – 166ft and Runway 28 -170ft:

Table 1:
<table>
<tr><td rowspan="2">Distance from Threshold</td><td>Kilometres (km)</td><td>0</td><td>0.5</td><td>1.0</td><td>1.5</td><td>2.0</td><td>2.5</td><td>3.0</td><td>3.5</td><td>4.0</td><td>4.5</td><td>5.0</td></tr>
<tr><td>Nautical Miles (nm)</td><td>0</td><td>0.31</td><td>0.63</td><td>0.94</td><td>1.25</td><td>1.56</td><td>1.88</td><td>2.19</td><td>2.5</td><td>2.8</td><td>3.13</td></tr>
<tr><td colspan="2">Indicative height above Threshold level (ft)</td><td>0</td><td>93</td><td>189</td><td>282</td><td>375</td><td>468</td><td>564</td><td>657</td><td>750</td><td>840</td><td>939</td></tr>
</table>

Table 2:
<table>
<tr><td rowspan="2">Distance from Threshold</td><td>Kilometres (km)</td><td>0</td><td>0.5</td><td>1.0</td><td>1.5</td><td>2.0</td><td>2.5</td><td>3.0</td><td>3.5</td><td>4.0</td><td>4.5</td><td>5.0</td></tr>
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<tr><td colspan="2">Indicative height above Threshold level (ft)</td><td>378</td><td>564</td><td>750</td><td>936</td><td>1128</td><td>1314</td><td>1500</td><td>1680</td><td>1878</td><td>2058</td><td>2240</td></tr>
</table>
</td></tr>
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Ref No.	Respondent	Question
OP.1.15	The Applicant	**Has the proposal taken account of nearby wind turbines and potential effect on radar operation?**
		Applicant's Response: The Applicant's proposal has taken into account both existing and planned wind turbine developments in the vicinity of the airport and their potential effect on radar operation. In addressing this issue the Applicant: • Has agreed a Statement of Common Ground (SoCG) with Vattenfall [TR020002/D3/SOCG/VWP] who operate both the Thanet Array and Kentish Flats offshore windfarms. The SoCG covers the potential interaction between aviation operations at Manston Airport, air traffic surveillance and wind turbines. It covers not only existing wind turbine operations but also Vattenfall's own DCO submission that would see an increase in the size of the Thanet Array. • Is closely monitoring developments in regard to air traffic surveillance (radar technology). The Applicant expects technology to be in a position to fully mitigate the historical detrimental effects of wind turbines on the safety of aviation air traffic management operations; allowing both current and planned windfarm developments to be accommodated without further mitigation. The Applicant will ensure that future Airport operational and surveillance infrastructure takes account of, and mitigates, the effects in the presence of wind turbines.
OP.1.16	The Applicant	**Has the proposal taken account of any potential bird strike hazards to the safe operation of the airport?**
		Applicant's Response: The ES has considered bird activity from a planning and environmental perspective but not an operational perspective. A number of engineering solutions will be implemented, such as locating the ponds away from the runway and using special grass seed mixes to avoid bird attractant species. Spike strips to stop birds perching on buildings and structures like approach lights will also be installed. Flags and humming wire may also be used to deter birds from foraging in seeded and

Ref No.	Respondent	Question
		disturbed areas; the use of this temporal deterrent would be an airport operator decision based upon bird population densities and aerodrome operations at the time. A specialist will be employed to survey the area around the site to check for anything that might attract birds such as badly managed food waste or ponds. This will be done well in advance of initial operations and then continue on a regular basis. The frequency of the surveys will be determined by the assessed risk. From an operational perspective potential aerodrome bird strike hazard will be managed in accordance with CAP 772 (Wildlife hazard management at Aerodromes) and will be considered by the CAA as part of the Aerodrome Certification process in accordance with CAP 168 (Licensing of Aerodromes), Chapter 5 (Wildlife Strike Risk Hazard management for Aerodromes) of which para 5.2 states: *In accordance with rules proscribed by EASA, the aerodrome operator shall:* *1. assess the wildlife hazard on and in the vicinity of the aerodrome;* *2. establish means and procedures to minimise the risk of collision between wildlife and aircraft at the aerodrome; and* *3. notify the appropriate authority if a wildlife assessment indicates conditions in the vicinity of the aerodrome are conducive to a wildlife hazard problem*.
SE.1 Socio-economic effects		
SE.1.1	The Applicant	**Tourism** **Has any assessment of potential economic effect caused by outbound tourism from local residents going abroad taken place?**
		Applicant's Response:

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		No likely significant economic effect is anticipated as a result of outbound tourism from local residents and hence a quantified assessment of the expected number of local residents that may transfer from local activities to outbound tourism has not been undertaken in the ES [APP-034]. Effects from outbound tourism were not included in the scoping report and no comment was made by Thanet District Council requesting such an assessment at the time. Nonetheless, for completeness the reasons why outbound tourism is not likely to result in significant adverse effects are summarised below: • Whilst the proposed routes are yet to be determined, the question assumes that a choice between a holiday in Ramsgate and/or Margate and a holiday in an outbound destination is created by the Proposed Development which cannot be met via existing connections. The proportion of residents/visitors that had no holiday abroad before the re-opening of the airport and who now decide to go abroad solely because of the existence of an airport nearby is likely to be very small. • There are a wide range of national and international destinations accessible to residents in Thanet via existing airports. Irrespective of the ultimate destinations served by the proposed development, these will not match the range and frequency of destinations served by Gatwick (1.5-hour drive time from Margate), Heathrow (circa 2 hours) and to a lesser extent London City Airport (circa 2 hours). Ebbsfleet international is around a 1-hour drive time, providing access to mainland Europe via the channel tunnel, whilst cross channel ferry access via Dover is circa 40 minutes. For any economic effect caused by an increase in outboard tourism from local residents, the relevant receptor would be local businesses and hence local employees and employers. The ES [APP-034] concludes that there would be a positive effect arising from both increased outbound (i.e. domestic) and inbound (i.e. international) visitors; this increase would benefit the same group of people. Moreover, if an increase in outbound tourism from local residents were to occur – however small – it is reasonable to assume at least some positive socio-economic effects associated with ticket purchases and associated spending in advance of such a flight would accrue to the local and regional economy. This would further offset any adverse effect.

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SE.1.2	The Applicant	Various relevant representations (including RR-0890, RR-0224, RR-1342, RR-0171, RR-0439, RR-0874, RR-0949) raise concern over the potential adverse effect of flights over Ramsgate on the growing tourist trade**.** **What is your view on this?**
		Applicant's Response: Socio-economic impact upon tourism as a result of the Proposed Development is considered within Chapter 13 of the ES [APP-034], paragraphs 13.8.68 - 13.8.85, which examine effects in Thanet and Kent at construction and operational stages, respectively. Once the additional visitors associated with the proposed development are taken into account, the overall effect is expected to be positive. This conclusion draws upon technical assessments in Chapter 12: Noise and Vibration and Chapter 14: Traffic and Transport of the ES [APP-034]. The assessment of the expected freight, passenger and job numbers is drawn from analysis in the Azimuth Report (Volume III and IV) [APP-085]. Specifically, regarding the potential adverse effects of flights over Ramsgate on the growing tourist trade, the socio-economic assessment concludes that whilst there may be an increase in the absolute noise level in Ramsgate, the effects of reopening the airport on tourism will be positive. This is explained further below. Potential adverse economic effects resulting from the reopening of the airport are centred on two aspects. • First, potential disruption to the local road network impacting upon employee and customer access to local attractions. There will be a higher number of HGVs and cars on the road network (Chapter 14: Traffic and Transport of the ES [APP-034]), with greatest increases on the A299 and Spitfire Way. Direct access to key tourist attractions is not anticipated to be significantly affected as these routes do not act as through roads and alternative routes are available. Mitigation measures are planned to manage movements and the overall economic effect upon tourist attractions arising from additional traffic will be either negligible or not significant (see Table 14.26) in Chapter 14: Traffic and Transport of the ES [APP-034].

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		• Second, in terms of indirect impacts upon amenity, such as increased traffic, noise or dust, detailed assessments have been undertaken in Chapter 6: Air Quality, chapter 12: Noise and Vibration and Chapter 14: Traffic and Transport of the ES [APP-034]. Based upon these assessments – and with appropriate mitigation measures – significant adverse effects are not expected on local residents. Whilst tranquil conditions of the area may be affected by aircraft noise, it is anticipated that the Proposed Development will attract more people to or through the area, so the number of people using associated local tourist amenities will rise, with an anticipated effect of minor (see paragraph 13.98.81) to moderate (see paragraph 13.8.85) beneficial significance. • Chapter 13 of the ES [APP-034] considers the number of additional passengers expected. In Year 5 this is estimated at just under 690,000 additional passengers, in year 10 just under 1 million and year 20 just over 1.4 million passengers. This is compared to recent (2012) data on visitor numbers to Thanet, which indicates some 3.1 million annual visitors to Thanet, of which some 775,000 (25%) are overnight visitors (paragraph 13.8.77). If the proportion of new visitors staying overnight reflect existing patterns, the increase in staying visitors could be c.45% by year 20 (paragraph 13.8.75). This illustrates that the overall quantum of visitors expected would represent a sizeable increase over recent visitor numbers. Challenges in drawing specific conclusions on the balance of influences, including external factors unrelated to the proposed development are also noted (See paragraphs 13.8.78 to 13.8.81). This is discussed further in the response to question SE 1.15. • Specifically, the ES notes (Paragraph 13.8.84) "levels of noise increase are small in comparison to existing levels at the most exposed locations which include the centre of Ramsgate, the port and the main beach". • Furthermore, details of the noise mitigation plan are contained in Chapter 12 of the ES: Noise and Vibration (see paragraph 12.5.4 to 12.5.19). The proposals include: a) Restrictions on night-time aircraft b) Annual quota counts for night time aircraft movements c) Restrictions on training flights d) The establishment of a community consultative committee and trust fund e) Noise monitoring systems

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		f) Departure noise limits and "track" (i.e. route) monitoring g) Runway preference measures to reduce overflights of Ramsgate h) Procedures for arriving aircraft to minimise noise i) Restrictions on engine testing Further measures associated with the aircraft dwelling relocation scheme; the aircraft noise dwelling insulation scheme; the insulation scheme for noise sensitive buildings; as well as the control of industrial and commercial sound alongside masterplan design measures to mitigate or manage noise are set out in paragraphs 12.5.9 to 12.5.19 of Chapter 12 of the ES: Noise and Vibration [APP-034].
SE.1.3	The Applicant	**Employment generation and scope for employment** [RR-1754] considers that mechanisation of freight would reduce the potential impact of jobs created by the airport. **What is your view on this?**
		Applicant's Response: Taking the three principle types of air freight - bellyhold, express and freighter - mechanisation in the handling process at airports is most advanced in the small package driven express freight sector where bar code and electronic tag technology allow automated processes. It has also found its way into major cargo centres built around bellyhold freight such as Heathrow, but because the freight being carried is more varied in nature (e.g. specialist handling like refrigeration and larger bespoke items) it cannot be as heavily mechanised. Freighters have the greatest mix of freight including pallet based as well as containerised cargo and is consequently the least mechanised. Manston's target market for freight will be principally be freighters but with express freight and in-house e-commerce operators like Prime also likely to be targeted. Manston will also offer plane to truck handling and serve specialist equine, perishable and emergency aid operations, none of which lend themselves easily to automation. This means that the scope

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		for mechanisation of the handling process is less likely at Manston than might be the case at airports like East Midlands and Heathrow, meaning any reduction employment potential from mechanisation is nominal.
SE.1.4	TDC	**Thanet Local Plan** TDC's Draft Local Plan to 2031 (dated 26 October 2018) states at Policy SP02 that: *"Manston Business Park is the key location for advanced manufacturing and large scale job creating development."* **Explain the effect that the consenting of the DCO could have on the attraction of advanced manufacturing and large scale job creating development.**
		Applicant's Response: N/A
SE.1.5	The Applicant	Concern in [RR-1601] is raised over the levels of perceived optimism applied to job creation figures. **i. Provide further justification and detail for the stated employment creation figures for the airport, including direct and indirect figures.** **ii. Do the skills exist locally for construction workers to be sourced from the local area?**
		Applicant's Response: i. A wide range of potential formula were examined. The Azimuth analysis (APP-085) adopted a 'top-down' approach to employment estimation in line with IATA and ACI guidance; the note attached as Appendix SE.1.5

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		(TR020002/D3/FWQs/Appendices) adopts the alternative 'bottom-up' approach as further justification for the figure of 2,417 jobs that is arrived at by the Azimuth Report. The Azimuth figures include an accompanying explanation of the component elements and the assumptions on which they are based as follows. Direct Jobs: East Midlands Airport, as a main UK freight hub provides the best comparator airport to the planned operation at Manston. In addition to the formula derived from East Midlands, a 2% adjustment for productivity gains has been introduced from Year 11. The reason for the choice of Year 11 in this case is that Manston Airport would be a new operation and relatively small, with operations taking a number of years to settle into a phase where productivity substantially affects job numbers. Indirect/Induced Jobs: No data on indirect and induced jobs could be found or derived for East Midlands Airport. Figures for Stansted Airport, as another key UK freight operation, are available and are corroborated by the operation at Luton Airport. This was therefore deemed to be the most appropriate formula to use in the Manston forecast. Catalytic Jobs: Two standard formulae were identified: 4,650 per 1,000 direct jobs (Intervistas, 2015) and 4,000 (6,100 less 2,100) per 1,000 direct jobs (ICAO, 2000). In order to be as conservative as possible in this category, which covers a wide range of jobs in the national economy, the lowest of the two formulae was applied in the Manston job creations forecast. Figures for construction workers have been calculated separately using a comparison to other similar projects such as at Cambridge and Dublin Airports. This is detailed in APP-085 Volume IV Section 5.4. Forecasts for jobs created by the airport operator were handled separately and shown as such in Table 6, paragraph 5.2.2. These figures show the number of jobs by airport function. ii. There are skills shortages in the construction sector affecting the South East region, which the South East Local Education Partnership (SELEP) is working to address. East Kent College is providing training in construction skills in the local area with

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		particular courses covering carpentry, painting & decorating, plumbing, electrical as well as brick laying and other trades. The college is actively seeking to recruit teachers in construction, including plumbing, electrical, building services, plastering, carpentry, multi-trades and maintenance operations. Thanet has an unemployment rate of around 5% compared to around 3.2% in the South East generally. The claimant count (NOMIS December 2018 data) in Thanet was: • Males 2,575 • Females 1,700 • Aged 16 to 24 860 • Aged 25 to 49 2,275 • Aged 50+ 1,140 The jobs density figure for Thanet, which represent the ratio of total jobs to population aged 16-64, is 0.70 compared to 0.87 for the South East. This figure shows that creating jobs in Thanet is vital to improving the local economy and improving the life chances of local people. 7.6% of the Thanet population have no qualifications compared to 5.2% in the South East. The Applicant hopes to raise the aspirations of local people by providing the opportunity for employment and demonstrating the need for skills. It is to this end that the Applicant has worked for around two years with East Kent College to ensure sufficient and appropriate courses and apprenticeships will be provided locally. The Applicant has held regular meetings with East Kent College over the last two years to establish the best way to encourage the creation of skilled workers locally who could take up the opportunities at Manston Airport. The Applicant is also engaged with Canterbury Christ Church University to offer higher-level skills, particularly in engineering subjects. This engagement is ongoing and the university is in the process of constructing and opening a facility for Science, Engineering, Technology and Health on the Canterbury campus. The School of Engineering will support the Kent and Medway Engineering, Design, Growth and Enterprise Hub (KM EDGE), an initiative designed to unlock regional economic growth and employment in engineering, science and technology sectors. The commitments will be captured in a s.106 agreement with Kent County Council, a framework of which was discussed at the meeting of 9 January 2019 (see Appendix SE.1.7 in TR020002/D3/TR020002/Appendices).

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SE.1.6	The Applicant	**Has any account been taken of potential job transfers or losses from other areas, should the proposal succeed in attracting freight operations from other airports?**
		Applicant's Response: No account of job transfers or losses from other areas have been incorporated into the Applicant's socio economic analysis, since the Proposed Development will meet currently unmet demand rather than displacing existing business. Since the Applicant does not foresee any reduction in ATMs at other airports, it is unlikely that overall job numbers at other airports will be affected by the re-opening of Manston Airport.
SE.1.7	The Applicant	**i. Has the Applicant identified potential partners for training schemes for required employment positions?** **ii. Has the Applicant identified potential educational partners and initiatives for required employment positions?**
		Applicant's Response: i. Yes. The Applicant has been working with East Kent College for around two years to identify the training schemes required to ensure local people have the necessary skills to apply for vacancies created by the airport operator and their supply chain partners. Additionally, the Applicant has been in discussions with other partners. Most recently, a meeting was held between the Applicant, Kent County Council – the Education People, Dover District Council, Canterbury Christ Church University, East Kent College, and Kent and Medway Skills Commission on 9 January 2019 (the note of the meeting is appended at Appendix SE.1.7 in TR020002/D3/FWQ/Appendices). A further meeting has been arranged for 20 February 2019 at which representatives from Thanet District Council and Swale Borough Council will also attend. The Applicant is also in discussion with Discovery Park as a potential partner.

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		ii. Yes. The Applicant has been working with both East Kent College and Canterbury Christ Church University for around two years. Work is progressing to establish need across a range of disciplines. In terms of school engagement, key to raising aspirations and ensuring young people consider electing to study STEM subjects, the Applicant is working with Kent County Council (The Education People) and their Enterprise Advisors in East Kent.
SE.1.8	The Applicant	**Is there more information over a proposed community trust fund? [AP-034, Table 15.3]**
		Applicant's Response: The community trust fund is secured as part of the Noise Mitigation Plan (APP-009). The proposal is for a sum of £50,000 per annum to be paid into the fund by the Applicant together with any penalties applied to aircraft operators for off-track flights and excess noise. The community consultative committee will be responsible for making decisions as to the allocation of funds which will be applied to community projects within the 50dBLAeq (16 hour) day time contour and the 40dBLAeq (8 hour) night time contour. This is distinct from any payments made under the Compensation Code.
SE.1.9	The Applicant	**i. What effect do you consider that the proposal may have on existing schools nearby in terms of effect on education caused by noise and disturbance?** **ii. Would schools be eligible for noise insulation grants?** **iii. Has any consideration been given to any possible effects on the proposed primary school at the Manston Green consented development?**
		Applicant's Response:

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		i. The HIA in Appendix 15.1 of the ES [APP-058] states at paragraph 6.29 (and in similar terms in paragraph 15.8.10 of Chapter 15 [APP-034]) that "*Depending on the existing ambient noise environment and existing building fabric, disruption to learning with measurable effects on reading age for children is likely at affected schools, prior to further mitigation. This may lead to a sustained adverse impact on quality of life and prospects for children affected.*" As the HIA notes, this effect is predicted prior to the implementation of noise insulation committed to by the Applicant in its Noise Mitigation Plan [APP-009] and would also depend on the existing fabric of the buildings (including any existing sound insulation) and the specific baseline noise environment at each location, which has not been established at this stage. The assessment of effects has therefore been made on a conservative basis and the potential impact on learning, described above, contributes to the overall 'moderate adverse' significance of effect of noise on health assessed. Potential for effects would be further clarified through the process of determining reasonable insulation, which would involve consideration of the above points. With implementation of reasonable mitigation, the potential for effects on education would be proportionally reduced. ii. As set out in the Noise Mitigation Plan [APP-009], the Applicant has committed to provide reasonable levels of noise insulation and ventilation for schools and community buildings within the 60 dB LAeq (16 hour) day time contour. iii. As set out in paragraphs 18.5.110 to 18.5.111 of the ES [APP-0035] a significant noise effect has been identified on the Manston Green development. Noise levels are forecast to exceed 63dB LAeq (16 hour) in Year 20. However, this is expected to be mitigated under condition 35 of the planning consent for Manston Green (Appendix OP.1.10).
SE.1.10	The Applicant	The AviaSolutions report, submitted as an appendix to the RR from Pinsent Masons LLP on behalf of Stone Hill Park Ltd [RR-1601] states that much of the previous cargo at Manston was fresh produce from Africa, and that: "*Manston was almost exclusively used for imports, and this averaged 107 tonnes per import, with virtually no export volume.*"[Paras 6.2, 6.3]. **i. Would you envisage a similar import/export profile for Manston under your proposal?**

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		ii. If so, how would such an export dominated profile affect the local economy in your view?
		Applicant's Response: i. No. Details of the import/export profile are shown below and provided in APP-085 Volume III in Tables 1, 3 and 4. Whilst Manston Airport was primarily used for imports, the Applicant expects to facilitate considerable exports as well as imports once the airport is redeveloped and re-opened.

	Inbound tonnage	Outbound tonnage
Y1	0	0
Y2	39,865	56,687
Y3	47,335	61,218
Y4	76,326	90,765
Y5	81,455	92,286
Y6	85,832	95,604
Y7	92,357	100,551
Y8	96,979	103,694
Y9	98,585	104,660
Y10	102,609	109,742
Y11	107,592	114,785
Y12	114,034	120,473
Y13	118,691	125,999
Y14	125,949	131,039
Y15	133,064	137,515

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<tr><th>Ref No.</th><th>Respondent</th><th>Question</th></tr>
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<tr><td>Y16</td><td>140,889</td><td>143,015</td></tr>
<tr><td>Y17</td><td>146,524</td><td>150,070</td></tr>
<tr><td>Y18</td><td>156,271</td><td>156,073</td></tr>
<tr><td>Y19</td><td>162,522</td><td>162,316</td></tr>
<tr><td>Y20</td><td>171,949</td><td>168,809</td></tr>
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ii. As can be seen from the previous answer, the forecast will not be 'export dominated', but there are intended to be considerably more exports than previously. There is a strong indication that providing export opportunities stimulates trade. For example, Frankfurt Airport states in their Annual Report for December 2018 (see Appendix SE.1.10 in TR020002/D3/FWQ/Appendices) that:

"More freighter aircraft services (flights) being offered effected a dynamic increase connected to the China as the biggest airfreight market." (page 7)

Research by the University of Kent found that 35% of local businesses export, particularly those from manufacturing, professional sciences and information technology sectors. Key external factors that facilitate international trade include the need to improve infrastructure including airports (APP-085, Volume IV, paragraph 2.1.10). This finding is corroborated by the Royal Academy of Engineering (APP-085, Volume IV, paragraph 2.1.11) who found that aviation and international gateways are seen as a crucial constraint to the economic growth of regions.

Thanet and other areas of Kent suffer from a high level of deprivation and underemployment as described in APP-085, Volume IV. The operation of the airport is expected to positively affect the local economy, stimulating not just overseas trade but also innovation and the take up of education and training, particularly in STEM-related subjects.
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<tr><td>SE.1.11</td><td>The Applicant</td><td>War graves</td></tr>
</table>

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		[RR-0839] mentions the existence of twentieth century war graves at the site. **i. Where are these located?** **ii. Would the proposal affect them and, if so, what measures are planned to obviate any impact?**
		Applicant's Response: i. The Applicant does not believe that there are any 20th century war graves at the site. At various times, the ashes of former personnel have been scattered in the Memorial Garden adjacent to the Spitfire Museum. The proposal will not affect the Memorial Garden. ii. In case any form of human remains turn out to be present at the site, the Applicant has included the standard article dealing with this issue in the latest version of the dDCO (TR020002/D3/2.1) submitted for Deadline 3
SE.1.12	The Applicant	Sections 13.2 – 13.3 of the ES [APP-034] outline the legislation, policy and guidance that have been used in the assessment of this aspect chapter. The methodology applied to the socio-economics assessment is then outlined in section 13.7 of the ES. The assessment focuses on potential impacts during construction and operation to business, employment, local services, crime, safety and tourism, and generally comprises a high-level desktop review of the current baseline followed by a qualitative assessment to determine likely significant effects. In the case of employment, section 13.1.4 of the ES states that the assessment has relied upon the use of secondary data within calculations and assumptions in order to generate an understanding of the potential effects, and highlights the limitations associated with the application of secondary data. Section 13.7 identifies that this secondary data is from National Online Manpower Information System (NOMIS) Labour market statistics provided by the Office for National Statistics.

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		Provide a comprehensive list of the assumptions made in the socioeconomic assessment and confirm whether these assumptions have been agreed with the relevant consultation bodies.
		Applicant's Response: The following assumptions are made in Chapter 13 of the ES [APP-034]. 1. That publicly available socio-economic data (listed in table 13.2 of Chapter 13 of the ES [APP-034]) provides a robust and accurate picture of socio-economic characteristics. This was set out in the scoping report (see point 5 below) and is standard practice. 2. That the estimates of employment at both construction and operational stages set out in the Azimuth Report (Volume I-IV) [APP-085] are based on reasonable comparisons and represent reasonable estimates of the scale of likely effects. These estimates are based on comparison with similar facilities elsewhere; i.e. based on empirical experience rather than economic modelling. Further detail is contained in the Azimuth Report (Volume I-IV) [APP-085], particularly chapters 3 and 4 of Volume III and Volume IV. See also Section 13.8, particularly 13.8.3 to 13.8.59 of Chapter 13 of the ES [APP-034]. Consultation undertaken on these elements are set out below (see points 1-2 below). Specific assumptions are made and documented in the Azimuth Report (Volume I-IV) [APP-085], necessary to generate these estimates. It is not practicable to consult on each and every one of these. 3. That an average number of construction jobs per year (210) associated with each phase represents an appropriate – albeit approximate - representation of direct construction employment demand at any one time. This is a reasonable assumption in the absence of very specific data on precise fluctuations overt the course of the construction period. Peak numbers are contained in the Azimuth Report (Volume IV), section 5.4 [APP-085]. 4. That a proportion of job opportunities at both construction and operational stages will be taken up by local people, including local unemployed people and that additional support will be provided by the Applicant where possible to facilitate this (commitments are listed in chapter 13, section 13.8.33 of the ES [APP-034]). See also Azimuth Report (Volume IV), chapter 6 in particular [APP-085]. 5. That for quantitative assessment it is appropriate to compare the number of additional *direct* new jobs at operational stage with the existing numbers of local employees in three sectors (Transportation and Storage, Administrative and

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		Support Services and other services – see paragraph 13.8.16, chapter 13 of the ES [APP-034]). This is a reasonable assumption based on the nature of the jobs expected to be created (documented in paragraph 13.8.15) and for the purposes of comparing overall labour demand with labour supply. 6. That the indirect and induced multiplier employment effects associated with the proposed development at construction phase are "medium", based on "average" economic linkages from the proposed development. This is a reasonable assumption based on relevant guidance in the absence of direct empirical data on local economic linkages. These linkages may be enhanced by additional measures set out in paragraph 13.8.33 of chapter 13 of the ES [APP-034]). 7. That for quantitative assessment it is appropriate to compare the number of additional indirect and induced jobs at operational stage with the existing numbers of employees in all sectors at local and regional levels (see paragraph 13.8. 35 to 13.8.40 of chapter 13 of the ES [APP-034]). This is a reasonable assumption given the nature of indirect and induced effects and it is used for the purposes of comparing overall labour demand with labour supply. 8. That the proposed traffic mitigation at construction phase prevents significant adverse effects on local businesses. For rationale see paragraph 13.8.60 to 13.8.64 as well as chapter 14 of the ES [APP-034]). 9. That additional employees at construction and operational stages will be based within Kent, so not generating significant additional demand for local services. This is based on a quantitative assessment of the labour market local and regionally with explanation given in paragraph 13.8.65 and quantitative analysis in section 13.8 of chapter 13 of the ES [APP-034]). 10. That the net effect of the development to local tourism businesses will be positive, with the balance of new visitors greater than any potential loss of visitors associated with adverse effects on amenity. This in turn assumes the mitigation measures – particularly those noted in chapter 12 noise and vibration and chapter 14 traffic and transport – of the ES [APP-034]) are effective. The following consultation activities were undertaken as part of the assessment: 1. Consultation with 24 organisations was undertaken (refer to Table 3 of Azimuth Report [APP-085] Volume II). The objective of this exercise was to collect information on processes and issues associated with air freight, investigating the likely trends in air freight in the future, identification of motivations to use Manston Airport and for information to feed into the forecast for Manston Airport (refer to paragraph 3.2.3 of the Azimuth Report [APP-085] Volume II). The

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		list of questions that each organisation was asked is shown in Figure 7 'Categories of interview questions within the Azimuth Report [APP-085] Volume II. In addition to the 24 full interviewees, information was collected from secondary sources. This is detailed in paragraph 3.4.3 of the Azimuth Report [APP-085] Volume II. 2. RPS used a combination of its in-house knowledge construction projects in the aviation sector and consultation within the construction industry. This consultation comprised discussions with a leading airport construction company who also has experience of construction in the south east of England. The consultation took place in the first two quarters of 2017. The scoping Report [APP-043], including a chapter on Socio-economics (Chapter 12), was submitted to PINS who provided a Scoping Opinion (10 August 2016) [APP-043]. Further consultation was undertaken in June/July 2017 and in January 2018. Comments were received from Dover District Council, Thanet District Council and Stone Park Hill Limited, as detailed in Table 13.3 of the ES [APP-034].
SE.1.13	The Applicant	Paragraph 13.8.13 of the ES[APP-034] states that employment forecasts for the operation of the Proposed Development have been calculated from the forecasts of freight and passenger traffic in the operational phase multiplied by the estimates of job numbers per tonne of freight and per million of passengers. **i. To provide clarity regarding this approach, provide a table presenting a breakdown of these calculations and any assumptions applied.** **ii. Comment on the robustness of this approach.**
		Applicant's Response: i.

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Airport operator jobs	
Total Year 5	697 (for details of how these figures are arrived at, see the answer to ii below)
Total Year 10	761
Total Year 15	883
Total Year 20	1,024
Assumption 1	Derived from operational experience of staffing numbers at other airports
Assumption 2	These jobs include passenger services, freight services, Air Traffic Services, Rescue and Fire Fighting Services, Airport operations, Maintenance, Motor Transport, Site and freight security, and Administration
Assumption 3	35% of the total number of staff on the payroll would be on duty during peak daily operations
Assumption 4	Most operational staff would be rostered in 12-hour shifts

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		Assumption 5	Shift changes would be likely to be at 07.00 and 19.00 hours	
		Assumption 6	Shifts would generally be four days on and three off, then three on and four off, allowing for an average 42-hour working week	
		Assumption 7	For Year 1, the employment figure is forecast to be in the region of 464 in the fourth quarter of Year 1 and has been annualised to give the figure of 116.	
		Assumption 8	The growth in automation has clearly taken place in passenger processing, including security body scanners, bag drop, and self-printed boarding cards. However, cargo handling has thus far been less automated. One exception is the automatic package routing that integrators have adopted in their warehouses. This automation has largely taken place and is reflected in the calculations made.	
		Assumption 9	The recent trials to automate the loading and unloading of Unit Load Devices (**ULD**) from belly operations are not relevant to the all-freight sector that will provide the focus for Manston Airport.	
		Assumption 10	The process used to handle all-freight aircraft requires relatively low levels of manpower compared to passenger handling and this is reflected in the employment calculations. Therefore any automation would have a relatively small impact.	

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		Assumption 11	Investment in Research & Development and implementation required to make a significant impact on the job creation forecasts is unlikely to be commercially viable.	
		Total Direct jobs		
		Total Year 5	2,150	
		Total Year 10	2,749	
		Total Year 15	3,094	
		Total Year 20	3,217	
		Assumption 1	Direct jobs include employment by the airport operator, airlines, general aviation, handling agents, airport security, immigration and customs, retail and food concessions, MRO, aircraft dismantling and recycling, car rental and surface transport providers, GA operators (e.g. flight schools, emergency services, air survey companies), other outsourced services including cleaning, building maintenance, training etc.	

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		Assumption 2	East Midlands and Stansted airports are currently the main UK airports handling dedicated freighters, making them the most obvious choices when seeking a comparator for Manston Airport.	
		Assumption 3	Since the Manston Airport proposition is unique (located relatively close to London's overcrowded airport system, would have multimillion-pound investment in state-of-the-art cargo facilities, and provide Kent, a traditionally underperforming County when compared with the rest of the South East, with international connectivity, promote inward investment, and stimulate growth in many sectors), East Midlands was assumed to be the best comparator. Therefore 887 direct jobs per one million passengers or 100,000 tonnes of freight was applied to the Manston Airport forecast.	
		Assumption 4	A 2% annually increasing productivity allowance has been made from Year 11. Since Manston Airport would be a new operation and relatively small, it is likely that operations would take a number of years to settle into an operational phase where productivity substantially affects job numbers. There are minimum levels of employment needed to provide a complete airport service and economies of scale cannot be realised in the same way as with large airports.	
		Direct jobs less airport operator jobs		
		Total Year 5	1,453	

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		Total Year 10	1,988	
		Total Year 15	2,211	
		Total Year 20	2,193	
		Assumption 1	The airport operator job figures have not been used to adjust the direct jobs calculation (with assumptions shown in operator jobs above).	
		Indirect/ induced jobs		
		Total Year 5	3,870	
		Total Year 10	4,948	
		Total Year 15	5,570	
		Total Year 20	6,151	

Ref No.	Respondent	Question		
		Assumption 1	Indirect jobs include jobs in the supply chain such as wholesalers providing food for in-flight catering, aviation fuel supply, travel agents, cleaning and maintenance contractors, for example.	
		Assumption 2	Induced jobs cover a wide range of jobs created as a result of those connected to the airport spending their income in the local or national economy.	
		Assumption 3	Figures for Stansted and Luton Airports were the most recent available. These show a multiplier for indirect/induced employment of 1.8 and this was applied to the Manston Airport figures. Note that indirect/induced and catalytic multipliers were not available for East Midlands Airport.	
		Catalytic jobs		
		Total Year 5	8,601	
		Total Year 10	10,996	
		Total Year 15	12,378	
		Total Year 20	13,668	

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		Assumption 1	Includes those jobs in organisations that are facilitated by the operation of the airport including tourism (accommodation, catering, attractions, shopping, etc.) and trade in imports and exports.	
		Assumption 2	Catalytic impacts on economies include demand side impacts on tourism and trade and supply side impacts on the supply chain through increased connectivity and the creation of larger potential markets and increased competition, investment (existing companies and inward investment), technology transfer, increased innovation, and upskilling of the workforce. For freight-focused airports, inbound air cargo provides businesses that rely on fast delivery (such as airlines, oil rig maintenance, etc.) with a reliable transportation mode for high-value equipment, machinery and spare parts. Air transportation also supports Just-in-Time practices, particularly for high value to weight goods with short product lifecycles such as electronic equipment. Businesses involved with perishable goods of all types, including not just electronic components but agricultural products such as flowers, fruit and some vegetables, are enabled by their use of air transportation.	
		Assumption 3	Reducing the congestion at other South East airports and reducing the negative affect on catalytic impacts of this congestion are assumed to positively affect national catalytic impacts.	
		Assumption 4	The forecast for catalytic jobs created by airport operations comes with a number of caveats. Firstly, these figures are generalised from European airports and may or may not be accurate in a UK setting. Secondly, the proposed redevelopment of Manston Airport is unique, given the extent of	

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	planned investment, the airport's location in an area of relative deprivation, and the capacity constraints at other South East airports.
Assumption 5	Catalytic jobs are not forecast until Year 3 to allow for impacts to be felt throughout the national economy.
Assumption 6	A ratio of 4,000 catalytic jobs per 1,000 direct jobs has been used since this is the lower (and therefore more conservative) of the ICAO and Intervistas 2015 (4,650 per 1,000 direct jobs) figures.

Construction work forecasts were provided separately based on other projects of a similar scale.

ii. The approach is robust as it relies on industry standard calculations as set out below. For the Manston Airport job creation forecast these are:

Direct Jobs: 887 direct jobs per one million passengers or 100,000 tonnes of freight (as used by East Midlands Airport) with a productivity adjustment of 2% (as used by York Aviation, 2017) made from Year 11.

Indirect/induced Jobs: 1.8 x direct jobs (as used by Stansted and Luton Airports)

Catalytic Jobs: 4,000 catalytic jobs per 1,000 direct jobs (as used by ICAO, 2000)

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		The Azimuth analysis (APP-085) adopted a 'top-down' approach to employment estimation in line with IATA and ACI guidance; the note attached as Appendix SE.1.5 (in TR020002/D3/FWQs/Appendices) adopts the alternative 'bottom-up' approach as further justification for the figure of 2,417 jobs that is arrived at by the Azimuth Report. The Azimuth figures include an accompanying explanation of the component elements and the assumptions on which they are based as follows. Direct Jobs: East Midlands Airport, as a main UK freight hub provides the best comparator airport to the planned operation at Manston. In addition to the formula derived from East Midlands, a 2% adjustment for productivity gains has been introduced from Year 11. The reason for the choice of Year 11 in this case is that Manston Airport would be a new operation and relatively small, with operations taking a number of years to settle into a phase where productivity substantially affects job numbers. Indirect/Induced Jobs: No data on indirect and induced jobs could be found or derived for East Midlands Airport. Figures for Stansted Airport, as another key UK freight operation, are available and are corroborated by the operation at Luton Airport. This was therefore deemed to be the most appropriate formula to use in the Manston forecast. Catalytic Jobs: Two standard formulae were identified; 4,650 per 1,000 direct jobs (Intervistas, 2015) and 4,000 (6,100 less 2,100) per 1,000 direct jobs (ICAO, 2000). In order to be as conservative as possible in this category, which covers a wide range of jobs in the national economy, the lowest of the two formulae was applied in the Manston job creations forecast.
SE.1.14	The Applicant	Dover District Council [RR-0490] has requested clarification from the Applicant on the scope of work that will be undertaken to ensure that the economic benefits of the Proposed Development for East Kent can be realised. Similarly, TDC [RR-1941] has highlighted that ensuring that local employment and training is provided from the Proposed Development is a main issue for consideration. The CEMP [APP-011], which is secured by Requirement 16 of the dDCO

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		[APP-006] does state that measures will be incorporated at the construction stage to optimise local recruitment but no further detail on this is provided. **Please provide clarification as to how you intend to work with the local planning authorities to ensure that the economic benefits of the Proposed Development, eg as outlined in the Register of Environmental Actions and Commitments and CEMP, are adequately realised, including an update on any such discussions that are currently taking place.**
		Applicant's Response:
SE.1.15	The Applicant	Paragraph 3.1.5 of the ES [APP-033] states that while certain aspects of the Proposed Development, for example the length and width of the runway and taxiways can be fixed for the purposes of application, other aspects, such as the size and location of buildings, will be subject to the Rochdale envelope approach. Paragraph 3.1.7 then states that the assessments contained in the technical chapters have adopted a realistic worst case based on the parameters set out in ES Chapter 3 and Figure 3.1. Chapter 13 of the ES does not specify an aspect specific worst case scenario beyond this. The Applicant's assessment of socioeconomic effects is based (in part) on assumption and professional judgment. The ExA consider that there is an inherent uncertainty associated with this approach. **Explain to what extent you have had regard to effects different or greater than those anticipated taking into account uncertainty and the potential for a worst case than that which is presented.**
		Applicant's Response:

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		The Proposed Development assessed as part of the ES [APP-034] responded to an agreed masterplan design set out in detail in chapter 3. Paragraph 3.1.5 of the ES [APP-034], notes all elements to the south of Manston Road are fixed subject to minor variations as detailed on the areas of work plans [APP-018]]. There is some flexibility within the Northern Grass area. Maximum parameters including building heights and square footage are set, however, there is an allowance for variation within these defined zones. More generally, the assessment of socio-economic effects in an ES will always be based, to some degree, on assumption and professional judgment in the interpretation of data. The method used does not differ significantly from the majority of EIAs. The assessment is a realistic assessment of the likely significant effects. The assessment of employment is taken from the Azimuth Reports (Volume I-IV) [APP-085] and the assessment of amenity effects draws on the technical analysis in chapter 12 noise and vibration and chapter 14 traffic and transport of the ES [APP-034]) in particular. A specific list of the assumptions made and the basis of these, are described in the response to SE 1.12 above with significant further detail in the Azimuth Reports (Volume I-IV) [APP-085]. Further detail on the employment forecasts are set out in the response to question SE 1.13. The assessment of effects in chapter 13 of the ES [APP-034] has been undertaken at different spatial scales (Thanet and Kent), recognising the potential for jobs to be taken up at these different spatial scales. It has made no assumption that Thanet District Council, Kent County Council or Visit Kent, for example, would invest in aligning the tourism offer to maximise the opportunity presented by the Proposed Development.
SE.1.16	The Applicant	Section 13.5 and Table 13.19 of the ES [APP-034] set out the mitigation measures that have been incorporated into the Proposed Development in order to prevent, reduce or offset impacts. The table sets out the predicted changes and potential effects on a receptor basis, along with the associated mitigation measure. Reference is made to the Construction Traffic Management Plan and Surface Access Strategy and Traffic Plan to secure elements of these mitigation measures. While the detailed mechanism to secure other elements of mitigation is not set out in the ES, it is provided by the draft Construction Environmental Management Plan (CEMP)[APP-011] and set out in the Register of Environmental Action and Commitments [APP-010], which the dDCO [APP-006] proposes to be certified documents.

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		Reference is also made to mitigation measures relating to the generation of local employment as follows: Implementation of measures to optimise local recruitment during construction and operation, including measures to ensure linkages to local training initiatives and/or agreements relating to local recruitment. There is further scope to employ those who are currently unemployed; assumption that approximately 1,800 jobs may be provided to those currently unemployed, if the unemployment rate were to drop as a result of the Proposed Development so that it is more in line with the Kent average. As noted above, in the case of employment, section 13.1.4 of the ES states that the assessment has relied upon the use of secondary data within calculations and assumptions in order to generate an understanding of the potential effects. **Please provide details of the monitoring and remediation measures to be put in place to ensure delivery of local employment or to account for impacts which may arise should local employees not be sourced, leading to an increase in the population which in turn places pressure on local services.**
		Applicant's Response: The Applicant is intending, subject to stakeholder consultation, to instigate a Local Hiring Policy which will be secured through a s.106 obligation. The Applicant will, of course, be an equal opportunities employer working in accordance with the Equality Act 2010, but the Company may have a positive policy in favour of hiring locally. Using local labour is intended to have the following benefits: • Foster community involvement with the airport and its supply chain • Reduce the environmental impact of commuting • Retain apprentices, trainees, graduates and staff within the area The Applicant is also intending to form a Local Employment Partnership Board, which will also be secured through a s.106 obligation. This Partnership Board is likely to consist of representatives from Thanet District Council, Dover District Council,

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		Swale Borough Council, Canterbury City Council and, potentially, Kent County Council. The Partnership Board may also include other stakeholders such as Job Centre Plus, and providers of careers services for adults. The aims of this Partnership Board would be to: • Act as a conduit between the Airport Company and local, regional and national government, taking responsibility for local strategic education, training and employment issues associated with the presence of an operational Manston Airport. • Suggest initiatives that meet local need • Bring together parties working on initiatives around the area where collaboration would have greater impact for the local community. • Allocate available funding. • Ensure suitable performance targets are set and monitor progress against these targets. The key to local employment is, however, in ensuring suitable and sufficient training and education programmes are in place and available to local people. To this end the Applicant is working with local HE, FE and schools to ensure • Education and training programmes available at all levels. • Careers advice is available to young people and also to older people and returners to work. Particular attention will be paid to the long-term unemployed, offenders, children in care and looked-after children, and hard to reach groups. • Aspiration raising, which is particularly pertinent in Thanet, which is an area of high deprivation with a low take-up of education at Higher levels. As well as local recruitment, local procurement initiatives will also be investigated.
Tr.1 Transportation and Traffic		

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Tr.1.1	The Applicant	In its RR KCC [RR-0975]state the proposed masterplan for the Northern Grass Area [APP-079] and wider highway mitigation proposals [APP-060 and 061] conflict with draft Strategic Routes Policy SP47 (within the draft Thanet Local Plan - 2031) that seeks to safeguard key road schemes and junction improvements to support the Thanet Transport Strategy. **What is the Applicant's view?**
		Applicant's Response: The KCC RR-0975 relates to a section of the Manston to Haine Road which is proposed in the Draft Thanet District Transport Strategy 2015-2031 and included within the draft Thanet Local Plan – 2031 (Strategic Routes Policy SP47). Figure 22 of the Strategy shows an **indicative** alignment which routes through the Northern Grass Area. Paragraph 9.3.18 identifies that "*it is anticipated that a new highway link would be created on the existing Northern Grassland within the airport site. The nature and route of this link will depend on the final proposals for this site.*" This link road alignment is not included within the DCO masterplan. However, in the pre-examination period, the Applicant, in consultation with KCC, has identified an alternative link road alignment that uses existing road infrastructure and land to the north of the Northern Grass Area. The detail of the route alignment is still in consultation with KCC, however, it does comply with the highway standards set out in the Design Manual for Roads and Bridges (DMRB) and with the design expectations of KCC that the route will be 40mph and provide appropriate footway and cycleway facilities. The alternative alignment does not alter the DCO plans. The Transport Assessment submitted as part of the DCO application included a sensitivity assessment of other proposed link roads that are included in the Thanet District Transport Strategy. In the pre-examination period, the Applicant, in consultation and agreement with KCC, has undertaken additional assessment of the traffic impact of the proposals using the Thanet Strategic Transport Model. The baseline for the modelling has been the Local Plan Do Something scenario, which incorporates the Thanet Transport Strategy interventions as

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		identified with draft Strategic Routes Policy SP47 and includes the alternative link road alignment. The results show that the alternative alignment delivers the same improvements to the wider network as that proposed by KCC. On the basis of the above, the Applicant does not agree that the proposed masterplan for the Northern Grass Area [APP-079] and wider highway mitigation proposals [APP-060 and 061] conflict with draft Strategic Routes Policy SP47 (within the draft Thanet Local Plan - 2031) that seeks to safeguard key road schemes and junction improvements to support the Thanet Transport Strategy for the following reasons: • An acceptable alignment for the section of the Manston Haine Road has been identified which doesn't affect the DCO Masterplan; and • Traffic modelling has been undertaken which takes into account the draft Thanet Transport Strategy.
Tr.1.2	The Applicant	KCC [RR-0975] is concerned that the Proposed Development will generate a material increase in traffic on already constrained highway links surrounding the site such as the B2050 Manston Road and Manston Court Road. This could lead to increased levels of vehicle conflict to the detriment of highway safety, amenity and the free flow of traffic. **What is the Applicant's view?**
		Applicant's Response: There will be an increase in traffic as a result of the Proposed Development. The impact of this increase has been assessed through the Transport Assessment [APP-060 – APP-061] and the Traffic and Transport Chapter (Chapter 15) of the ES [APP-034]. Paragraph 7.1.1 of the Transport Assessment defines how the need for mitigation has been identified. *"The impact of the development traffic and need for mitigation has been based upon two conditions:* • *Does the impact of the development traffic result in the RFC exceeding the standard threshold of 0.85 at roundabouts and priority junctions, or 90% DoS for signalised junctions, and if so to what extent; and*

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		• *If the ratio of RFC is in excess of 0.85 at priority junctions or roundabouts, or 90% DoS saturation at signal junctions, does the development make the situation **significantly** worse.* *The key issue is the need to ensure that development proposals strive to achieve **nil detriment** ('no worse off') to the road network in the assessment year(s)."* Where the assessment work identified triggers for mitigation based on these conditions, which can result in impacts on highway safety, amenity and the flow of traffic, mitigation has been identified which addresses these issues. Mitigation measures are proposed so that there will be no detrimental effect on the indicators described above. Since the submission and acceptance of the DCO application, there has been further consultation with KCC. This has involved reaching agreement on the trip generation and distribution methodology, the use of the Thanet Strategic Traffic Model when it became available for third party use and the identification of an alternative Manston Haine Link to avoid a route through the Northern Grass Area. A revised Transport Assessment and associated appendices will be submitted that sets out the methodology, results and any revisions to mitigation proposals. This is expected to be submitted by Deadline 4.
Tr.1.3	The Applicant	KCC [RR-0975] believes the trip generation and distribution methodology presented in the Transport Assessment [APP-060 and 061] are heavily based on assumptions which are not adequately justified or referenced to appropriate 'real world' examples in a number of cases; notably Heavy Goods Vehicle movement profiles and load factors, and airport staff shift patterns and staffing requirements. KCC set out that this limits their ability to comment on their validity with a sufficient degree of confidence and to assess the appropriateness of the proposed highway mitigation strategy. **What is the Applicant's view?**
		Applicant's Response:

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		In the pre-examination period, the Applicant has undertaken further consultation with KCC and agreement has been reached on the trip generation and distribution methodology. KCC now accept that the methodology is appropriate subject to the two minor amendments as set out below: (a) Shared taxi was removed as part of the mode share mix; and (b) Arrival times for passengers have been revised so they are closer to the time of the flight departure. Those amendments will be reflected in revised assessments based on the KCC Thanet Strategic Transport Model flow outputs in the revised Transport Assessment expected to be provided for Deadline 4. The Applicant has therefore addressed the comment made by KCC.
Tr.1.4	The Applicant	KCC [RR-0975] believes that the Applicant's mitigation strategy [APP-060 and 061] should be considered within the framework of the draft Thanet Local Plan - 2031 and its supporting Transport Strategy. The site and junction-specific [APP-062 to APP-073] – rather than strategic – approach to capacity assessment taken in the Transport Assessment is considered inappropriate, resulting in highway mitigation proposals that deliver only partial benefits, and which do not align with, or incorporate, the robust, long-term solutions proposed by the Thanet Transport Strategy. **What is the Applicant's view?**
		Applicant's Response: The Transport Assessment [APP-060 – APP-061] and Traffic and Transport Chapter (Chapter 15) of the ES [APP-034] submitted as part of the DCO application assessed the increase of traffic on the road network and junctions as a result of the Proposed Development and took account of traffic growth due to the allocations in the draft Thanet Local Plan. Where

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		there are material increases in traffic predicted, measures to mitigate the impacts are identified so that the transport network is no worse off with the Proposed Development. This is in line with NPPF paragraph 108 c) "*any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*" It is acknowledged that KCC has a strategic remit of identifying transport solutions for the wider area that addresses existing issues and long term growth, as set out in the draft Thanet Transport Strategy. In the pre-examination period, the Thanet Strategic Transport Model (TSTM) has become available for third party use. The model includes the long term solutions proposed by the Thanet Transport Strategy. The Applicant, in consultation and agreement with KCC, has commissioned model runs of the Proposed Development traffic generation and where there are material increases in traffic, mitigation measures are proposed so that there will be no detrimental effect. This is expected to be submitted by Deadline 4. The Applicant has therefore addressed the comment made by KCC.
Tr.1.5	The Applicant KCC	The ES Volume 15 Part 1 [APP-060] Para 3.2.1 notes that "*At the time of the preparation of this TA, a formal request to use the model has been made, and a detailed scoping methodology is soon to be provided to KCC. However, the model was not ready to use before the submission of this DCO application*." **i. Is the model yet ready and, if so, will it be used in the production of further traffic analysis?** **ii. When would this further work be made available to the ExA?** **iii. Please confirm what the impact of the modelling work is on the ES traffic and transport assessment and linked assessments such as air quality and noise.**

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		Applicant's Response: i. The Thanet Strategic Transport Model became available for third party use post the DCO application submission. The Applicant has commissioned model runs to test the impact of the Proposed Development and this will be used in the production of further traffic analysis. ii. This work is expected to be submitted for Deadline 4. iii. Sensitivity tests are being carried out to establish whether any of the impacts related to transport data and reported in the ES will change as a result of the revised transport modelling. The outcome of the sensitivity tests is expected to be provided for Deadline 4.
Tr.1.6	KCC	The ES Volume 15 Part 1 [APP-060] Para 3.2.3 asserts that "*Spreadsheet modelling is an acceptable approach and the methodology is set out in this TA*." This assertion needs to be justified. **Does KCC agree with it?**
		Applicant's Response: N/A
Tr.1.7	The Applicant	**i. Are there likely to be traffic movements associated with the aircraft recycling facilities, business aviation hangars and facilities, and helicopter stands?**

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		ii. If so, have these been taken into account in the Transport Assessment? **iii. If so, where?**
		Applicant's Response: i. Yes, there will be a limited number of traffic movements associated with these facilities. Trip generation rates have now been agreed with KCC. It should be assumed that trips arising from the proposed aircraft recycling facilities, business aviation hangars and facilities, and helicopter stands were captured in the overall trip generation figures for the airport. The Applicant confirms that the figures agreed with KCC for the site as a whole will not be exceeded as a result of these movements. ii. A breakdown of the traffic movements associated with these facilities will be included in the revised TA to be submitted at Deadline 4.
Tr.1.8	The Applicant	The identification of sensitive links for further assessment has been based on 24 hour traffic flow data (ES Table 14.19 [APP-034]). This does not address any daily peaks in either local traffic or airport traffic, where additional traffic may impact on existing congestion issues. **i. Provide further justification for the use of 24 hour vehicle flows (ES Table 14.19 [APP-034]) rather than peak vehicle flows to screen in specific roads for further assessment.** **ii. Explain whether use of the peak flow rather than the 24 hour flow would affect the findings of the assessment and the links screened into the assessment.**
		Applicant's Response:

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		i. The Proposed Development will operate over a 24 hour period and 24 hour vehicle flows have been used in the Traffic and Transport chapter (Chapter 15) of the ES [APP-015] in order to understand the overall percentage of traffic growth as a result of the Proposed Development. 24 hour traffic flows have also been used in the Air Quality assessment and 18 hour flows have been used in the Noise assessment, which are the standard approaches to assessment. Daily peaks in local traffic have been assessed in the Transport Assessment [APP-060 – APP-061] which considers the impacts of the Proposed Development on congestion on road links and at junctions, as set out in Section 7 of the document. This is a more detailed assessment as it looks at impacts on capacity and congestion. ii. The use of peak hour flow may affect the findings of the Traffic and Transport assessment in the ES Chapter, and it is proposed once the Kent County Council traffic modelling is complete, to provide additional assessment for not just the 24 hour period but also the AM and PM Peak periods as part of the screening of receptors.
Tr.1.9	The Applicant	The caption for ES Table 14.19 [APP-034] is '2039 Compared with 2039 Peak Operational Traffic Year 20(2039)'. The heading for the sixth and seventh columns of the table reads '2039 future baseline plus construction'. **Confirm whether the data in these columns also includes operational traffic.**
		Applicant's Response: The Applicant confirms that the sixth and seventh column headings are incorrect and should read "2039 future baseline plus operational". The table only includes operational traffic. It is also noted that there is a reference to construction traffic in paragraph 14.9.8 that will be removed in the revised chapter when submitted once the traffic modelling is complete. There is no construction activity anticipated to take place in the final two years of the programme for the Airport (2038/2039).

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Tr.1.10	The Applicant	A number of assumptions that underpin the assumed traffic flows used in transport modelling are set out in Volume 15, Section 6.6 of the Transport Assessment [APP-060]. The assumptions include data provided by 'the Client' or from 'aviation experts'. **Provide further substantiation for the following assumptions:** **i. Spreading HGV flows over the 24 hour period rather than considering peak flow periods;** **ii. 30% efficient working;** **iii. Traffic counts have been undertaken in the winter rather than the summer periods (March and October);** **iv. 10% 'tail to tail' ratio;** **v. Traffic generation data provided by 'the Client' in Tables 6.4.4 and 6.6;** **vi. Average loads provided by 'aviation experts' (TA paragraph 6.4.17);** **vii. Mode share (TA Table 6.8);** **viii. Overnight mode share and definition of 'overnight'; and** **ix. 45% of staff not on site on a particular day (day off, off shift, sickness) (TA paragraph 6.4.56).**
		Applicant's Response: i. HGV Spreading - At this stage in the process there is no information about scheduling of air traffic movements. The optimum practice by freight operators is to for HGVs to travel outside of the peak hours in order to avoid risk and uncertainty

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		of journey times caused by traffic congestion. Spreading the HGV traffic over a 24 hour period is considered to be a robust approach as it results in capturing HGV movements during the peak hour periods, rather than assuming no HGV movements. This justification has been accepted by KCC and no changes were made to the HGV distribution across the day as part of the trip generation assumptions included in the recent Pre-Examination period strategic modelling work. ii. 30% Efficient Working - The Domestic Road Freight Statistics from the Department for Transport (DfT) indicate that for all HGV traffic on UK Roads in 2004 only 27% would run empty, and in 2014 that percentage had increased marginally to 29% and has not varied much in the preceding years. This indicates that around 70% of vehicles are loaded from origin to destination while 30% are empty from origin to destination. On this basis, the Transport Assessment (TA) [APP-060 – APP-061] could have assumed a higher proportion of efficient working, up to 70%. However, a robust approach has been adopted by identifying a lower proportion of 30%. This justification was accepted by KCC and no changes were made to the % for efficient working as part of the trip generation assumptions included in the recent Pre-Examination period strategic modelling work. iii. Traffic Count Periods - Traffic counts have been undertaken in the Spring and Autumn which are generally accepted as being the most suitable for survey work (as set out in the Design Manual for Roads and Bridges [DMRB], e.g. TA 11/09). It should also be noted these counts now do not form part of the traffic flow methodology for future year assessment as the Strategic Transport Model is underpinned by traffic counts undertaken by KCC. iv. 10% tail to tail ratio This has been based on the department for Transport (DfT) document *"The air freight end-to-end journey: An analysis of the end-to-end journey of air freight through UK international gateways data"*, 2009, which provides information on estimated annual volume of transhipment (aircraft-to-aircraft [or tail-to-tail as referred to in the TA]). On page 15 of the document it is stated that aircraft-to-aircraft is very similar to transfer passengers Interlining, the cargo arrives at the UK on one aircraft; it is then removed and loaded onto another aircraft for onward shipment. This accounts for an estimated 15% of UK air freight traffic. Figure 19 on the same page of the document set out estimated volume of transhipment by five different airports. The

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		most relevant one to the Manston Airport proposal is East Midlands Airport (EMA) which had an estimated 25,000 tonnes of transhipment. With reference to reported activity data for 2008 available from the UK Civil Aviation Authority, EMA carried a total freight of 261,500 tonnes. Aircraft-to-aircraft was approximately 10% of this. v. Traffic Generation Provided by 'the Client' – The fuel tanker trips have been calculated from a series of calculations on the needs for fuel based on the anticipated numbers of flights arriving and departing the site for freight and passengers. A breakdown of these calculations for the year 20 of the proposed programme (worst case) is set out below detailing how the figures of 21 arrivals and 21 departures of fuel tanker have been derived in the TA. Year 20: • Prediction for freight flights a fuel burn of 257,722 (Klitres) per year; • Prediction for passenger flights a fuel burn of 27,898 (Klitres) per year; • Total fuel burn (or fuel requirements) of 285,620 (Klitres) per year; • Fuel tankers assumed to be able to carry 38,000 litres of fuel; • As such 285,620 (Klitres) of fuel requires 7,516 fuel tankers per year; and • This is calculated as 21 tankers of fuel per day (rounded up) with deliveries across the 365 days of the year. Fuel deliveries are, as set out in the TA, anticipated to arrive in a uniform pattern across the 24 hours of the day as the facility cannot accommodate multiple vehicles per hour. Tankers take some time to discharge the contents of the tanker and as such a schedule with the facility operating cross 24 hours is required. The same calculations have been undertaken based on fuel requirements for years 2-20. In summary this results in peak hour impacts of 1 arrival and 1 departure in the AM and PM peak hours and as such the sensitivity of the fuel tanker deliveries, which access directly onto the A299 via Canterbury Road West is not considered materially important in the overall traffic generation calculations of the proposed airport.

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This has been accepted by KCC as part of the trip generation assumptions included in the recent Pre-Examination period strategic modelling work.

vi. Average Loads

Average load data has been gained from the annual reports for airlines which set out the company average load in the last calendar year and it has been assumed an average load factor of 90%.

vii. Mode Share - Mode share has been derived from other airport examples, sustainable transport access opportunities and the Applicant's aspirations to achieve modal shift from car use.

The mode share has been discussed with KCC in the post DCO submission period. This has resulted in removal of the mode share of "Shared Taxi" as KCC felt that this was not achievable in the Thanet location. Revisions to the mode shares to take account of this has resulted in an increase in all other mode shares. This has been taken into account in the Thanet Strategic Transport Model work that has been undertaken. The revised mode share proportions for the day time and night time periods are set out below
<table>
<tr><th>DAY TIME</th><th>0-9 Years</th><th>10 years</th><th>20 years</th></tr>
<tr><td>Bus</td><td>3%</td><td>7%</td><td>10%</td></tr>
<tr><td>Taxi</td><td>5%</td><td>6%</td><td>6%</td></tr>
<tr><td>Car Parked</td><td>46%</td><td>41%</td><td>37%</td></tr>
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Car Drop Off	46%	41%	37%
Rail (then bus)		5%	10%
	100%	100%	100%

NIGHT TIME	**0-9 Years**	**10 years**	**20 years**
Bus			
taxi	6%	10%	13%
car parked	47%	45%	44%
car drop off	47%	45%	44%

Ref No.	Respondent	Question

rail (then bus)			
100%	100%	100%	

viii. Overnight Mode Share - The overnight period is defined as 10pm to 6am based on experience working on other projects and the basis of flights to and from the airport used for the traffic generation methodology.

ix. Shift Patterns - It has been identified that first flights from smaller airports typically depart between 6.30am and 7.00am. Staff will be on site from 5.00am to be able to start processing passengers. If an aircraft is based at the airport the final return flight will typically be between 10.00pm and 11.00pm with the terminal being clear of passengers by approximately 11.00pm. Typically the final passenger processed for departure will be between approximately 8.00pm and 9.00pm having arrived at the airport from 7.00pm onwards.

Airports work on a two shift pattern per day and a three shift rotation to cover 7 days a week with typically 40-48 hrs per shift depending on arrival patterns.

This is the case at Newquay Airport and is similar at other small airports.

The actual patterns for different types of staff (ATC vs security vs ramp vs check-in) will be different, however the estimates on shift patterns presented in the TA figures provided a robust picture of what may be implemented which corresponds with 'real world' examples.

The justification above has been accepted by KCC and no changes to the methodology relating to shift patterns and included in the recent pre-examination period strategic modelling work.

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Tr.1.11	The Applicant	The preliminary construction traffic management plan (PCTMP) paragraph 6.5.4 [APP-072] *states that year 1 "represents a peak of construction traffic movements".* **Confirm why year 2 has been selected as the worst case year for assessment of construction air quality and noise.**
		Applicant's Response: Years 1 and 2 are the peak years for construction traffic with exactly the same construction traffic per year anticipated. For the PTCMP, Year 1 is valid as the assessment year as there is slightly less background traffic on the local highway network and the impact of the construction traffic in percentage terms is therefore slightly higher and a robust assessment can be undertaken. The Noise and Air Quality assessments use Year 2 as this is when the greatest number of aircraft movements occur alongside peak construction activity/transport movements.
Tr.1.12	The Applicant	ES paragraphs 14.4.20 and 14.5.23 [APP-034] state that there has been double counting of some heavy goods vehicle (HGV) movements during surveys. **i. Confirm which survey locations have double counted HGV flows; and** **ii. show how the flows have been adjusted to take account of this.**
		Applicant's Response: i. The survey locations affected are as follows:

Ref No.	Respondent	Question
		• 1 - A256 South of Sandwich Road • 3 - A299 Canterbury Road E between A256 and Royal Harbour Approach • 4 - Manston Road between Haine Road and the railway line • 7 - A254 Margate Road • 8 - A256 Westwood Road between Poorhole Lane and Northwood Lane • 9 - A254 Ramsgate Road between Nash Lane and Farley Road • 10 - A254 Ramsgate Road north of the junction with B2052 College Road • 11 - A28 Canterbury Road, east of junction with Domneva Road • 15 - A299 Thanet Way west of junction with A28 • 20 - B2190 Spitfire Way between B2050 Manston Road and B2190 Columbus Avenue • 21 - A299 between B2190 and Canterbury Road West ii. The flows were adjusted by using the traffic turning counts traffic flows at either end of these links which provide a more accurate representation of HGV flows. For example, ATC 1 at the A256 South of Sandwich Road in the ATC traffic survey indicated 304 HGVs (two-way movements) in the AM Peak. The video surveys undertaken at the junction of the A256/Sandwich Road during the same period indicated that the two-way HGV flow was actually 173. As such the figure of 173 was used for HGV movements in the AM peak on the link. The location of the ATC means that no traffic could have left the link from that observed in the traffic turning count video survey so is a valid number.
Tr.1.13	TDC KCC	**Do TDC and KCC agree with the scope of cumulative projects considered in the transport assessment [Section 10, APP-061]?** **What information does KCC consider is available to assess the impact of a Thanet Parkway Station on 2039 traffic flows?**

Ref No.	Respondent	Question
		Applicant's Response: N/A
Tr.1.14	The Applicant	**Confirm how construction traffic management measures outlined in Transport Assessment Appendix K – PCTMP [APP-072] and operational traffic management measures outlined in Transport Assessment Appendix L – Framework Travel Plan [APP-072] will be secured in the absence of specific reference to this plan in either the Register of Environmental Actions and Commitments [APP-010] or the draft Development Consent Order [APP-006].**
		Applicant's Response: Prior to commencement of construction of any part of the Proposed Development, the CTMP, which will be a finalised version of the PCTMP, must be approved as part of the CEMP. This is secured through requirement 6 of the dDCO.
Tr.1.15	The Applicant	**With particular reference to junction 20, confirm what environmental assessment of the junction mitigation proposals due to land take has been undertaken.**
		Applicant's Response: KCC has an improvement scheme for that junction which has been taken into account within the strategic modelling which will be presented in the updated Transport Assessment expected to be submitted at Deadline 4. The Applicant is therefore no longer proposing an improvement scheme at junction 20.
Tr.1.16	The Applicant	**Respond to Highways England's objection [RR-673] to the Proposed Development and their concern that M2 J7 and A2-A258 Duke of York Roundabout have not been assessed and that "*the applicant has not demonstrated that the***

Ref No.	Respondent	Question
		***development will have an acceptable impact on highway safety or that the residual cumulative impacts on the road network would not be severe*.”**
		Applicant's Response: The Transport Assessment [APP-060 – APP-061] submitted as part of the DCO application included a chapter on the Strategic Road Network (Chapter 8) which was based on a consultation meeting with Highways England officers. Subsequent to the DCO application submission and during the pre-examination period, the Applicant has met with Highways England officers and agreed to undertake an assessment of the impact of the Proposed Development at M2 J7. Highways England officers confirmed that there was no requirement to assess the Duke of York Roundabout. Highways England officers agreed to provide traffic data and the details of an improvement scheme in order for the Applicant to make the assessment. This information has not been forthcoming to-date. The Applicant will continue to liaise with the Highways England officers in order to make this assessment and identify impact on highway safety and the residual cumulative impacts on the road network.
Tr.1.17	The Applicant	Paragraph 5.10 of the Airports NPS states that the Applicant should assess the implications of airport expansion on surface access network capacity using the WebTAG methodology stipulated in the Department for Transport guidance. **i. Does the TA produced by the Applicant comply with this standard; and** **ii. if not, in what regard is it deficient and what steps will be taken to make good any omissions?**
		Applicant's Response: i. WebTAG is a methodology that provides guidance on the role of transport modelling and appraisal, and how the transport appraisal process supports the development of investment decisions to support a business case. Manston

Ref No.	Respondent	Question
		Airport is a privately funded development project and as such this guidance is only partially relevant to the appraisal of the proposed scheme. The elements of the appraisal guidance relating to business cases for publicly funded schemes are not appropriate in this case. Notwithstanding this, the approach adopted within the Transport Assessment (TA) [APP-060 – APP-061] submitted as part of the DCO application followed the principles of modelling and forecasting, as set out in TAG Unit M1.1. The updated Transport Assessment expected to be submitted by Deadline 4 also follows these principles. ii. As noted above the updated TA will make reference to WebTAG where appropriate however it is not considered that the TA produced by the Applicant contains omissions as such, rather it excludes elements that are not appropriate to a scheme of this type. It is not intended that the revised TA adopts those elements, indeed it would not be possible to do so.
Tr.1.18	KCC	**Provide a response to the way in which the Applicant has addressed your concerns and considerations as set out in the ES Volume 15 APP-060 Table 3.2 'KCC – January 2018 Section 42 Consultation Response'.** **NOTE**: This question may be responded to through a SoCG or a LIR.
		Applicant's Response: N/A
Tr.1.19	Highways England	**Is Highways England content with the scope of the additional work detailed in the ES Volume 15 [APP-060] Para 3.2.2 and with the results obtained?**
		Applicant's Response:

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		N/A
Tr.1.20	KCC Network Rail	The ES Volume 15 [APP-060] APP 60 Para 3.4.4 details discussions on the proposed Thanet Park Way Station. **i. What is the current status of the project?** **ii. Is any progress on this anticipated during the course of this Examination?**
		Applicant's Response: N/A
Tr.1.21	The Applicant	The ES Volume 15, Part 2 [APP-061] paras 6.4.48 to 6.4.51 address the modal share of staff journeys. **Are the figures produced in Tables 6.16 to 6.27 based on the existing provision of rail services or is there an assumption that the proposed Thanet Park Way Station will be operational during the period considered?**
		Applicant's Response: The figures are based on the existing rail services provision. At the time of preparation, the Thanet Parkway Station planning application had not been submitted and so this was not considered to be a committed development for inclusion within the Transport Assessment (TA) [APP-060 – APP-061]. Notwithstanding this, the Applicant has reviewed the Transport Assessment for the Thanet Parkway Station and also held a meeting with TDC and KCC to discuss the implications of the Thanet Parkway Station on the local road network and on the Proposed Development. It was concluded that in terms of traffic flows, there is an insignificant change. In terms of public transport, the journey time between the Parkway Station and the Proposed Development is marginally shorter and quicker

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		than Ramsgate Station and this will need to be taken into account when identifying the shuttle bus service requirement within the revised TA and associated documents which is expected to be submitted by Deadline 4.
Tr.1.22	The Applicant KCC	The ES Volume 15, Part 2 [APP-061] para 7.2.1 notes two future year scenarios that have been used in carrying out traffic impact assessments: 2039 Baseline with background traffic growth; and 2039 Baseline with Proposed Development traffic. **State whether a more logical formulation should include 2039 Baseline with both background traffic growth and Proposed Development traffic.**
		Applicant's Response: The terminology of how the paragraph is written is misleading. Two scenarios have been undertaken, as follows: • 2039 Baseline (which includes background traffic growth); and • 2039 Baseline (which includes background traffic growth) + Proposed Development Traffic.
Tr.1.23	The Applicant	APP 61 Table 6.2 sets out that construction activities will be undertaken in 2037. **How will overall traffic movements in 2037 compare with those in 2039 when there are no construction activities?**
		Applicant's Response: As part of the Transport Assessment [APP-060 – APP-061], analysis of total (construction and operational) traffic flows over the 20 year period was undertaken to identify maximum flows.

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		The final year of construction is 2037 and the fully operational year is 2039. A comparison was undertaken between the 2037 construction + operational traffic and 2039 operational traffic. This identified higher flows in the latter as the level of operations and passenger numbers have increased by more than the construction activities have reduced. The results of this comparison for total traffic across the 24 hour period are shown below: See table 1 below. The table above indicates that the 2039 operational only traffic is higher and as such was a worst case for assessment. The results for the AM and PM Peak hour comparison are shown below: See table 2 below. As with the comparison of 24 hour flows this confirmed that the fully operational year 2039 has the highest traffic flows and was used as the basis for assessment.

	2037			2039		
	Year 18 (last year of construction)			Year 20		
	Arrivals	Deps	Total	Arrivals	Deps	Total
Total Dev	**5089**	**5084**	**10133**	**5490**	**5445**	**10903**
Construction	**193**	**193**	**386**			
	5282	5277	10519	5490	5445	10903

AM Peak

	2037			2039		
	Year 18 (last year of construction)			Year 20		
	Arrivals	Deps	Total	Arrivals	Deps	Total
Total Dev	**159**	**483**	**636**	**158**	**515**	**669**
Construct	**3**	**6**	**9**			
	162	489	645	158	515	669

Ref No.	Respondent	Question
Tr.1.24	The Applicant	In the ES Volume 15, Part 2 [APP-061] Table 7.1, Table 7.9: the status of the text below the Tables is unclear. **Clarify.**
		Applicant's Response: It is assumed that the referencing is the text below Table 7.5 (not 7.1) and as well as Table 7.9. The text is as follows: *"Figures in brackets are the difference between the 2039 baseline (existing layout) and 2039 +development (mitigation layout)"* This text could not be seen as the tables were overlapping the text. It is proposed this issue is addressed in the updated Transport Assessment (TA) expected to be submitted by Deadline 4.
Tr.1.25	The Applicant	In the ES Volume 15, Part 2 [APP-061] Section 7 gives details of junction analysis. For Junction 6 the Ratio of Flow to Capacity (RFC) for the PM peak at A253 Canterbury Road leg is 1.26 for the year 2039 plus development traffic analysis as given in Table 7.22. The RFC for the same leg after mitigation given in Table 7.23 is 1.91. **i. How does this represent mitigation?** **ii. Is this analysis correct?**
		Applicant's Response:

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		i. This is a typographical error. The figure in Table 7.22 should be 0.91. ii. This indicates the improvement in capacity performance as a result of mitigation and as such the analysis is correct in the TA.
Tr.1.26	KCC	**In respect of In the ES Volume 15, Part 2 [APP-061] Section 7, is KCC content with the lack of mitigation measures proposed for junction 8 as set out in Para 7.11.7?**
		Applicant's Response: N/A
Tr.1.27	KCC	In the ES Volume 15, Part 2 [APP-061] Table 7.56 shows that junction 16 is currently working above capacity. Para 7.18.7 indicates that this will still be the case following mitigation and using Year 2039 plus development traffic figures. **Is this acceptable to KCC?**
		Applicant's Response: N/A
Tr.1.28	KCC	In the ES Volume 15, Part 2 [APP-061] Table 7.96 shows that junction 27 is currently working above capacity. Para 7.28.6 indicates that this will still be the case following mitigation and using Year 2039 plus development traffic figures. **Is this acceptable to KCC?**

Ref No.	Respondent	Question
		Applicant's Response: N/A
Tr.1.29	KCC	**In respect of In the ES Volume 15, Part 2 (APP-061] Section 7, is KCC content with the lack of mitigation measures proposed for junction 28 as set out in paragraph 7.29.4?**
		Applicant's Response: N/A
Tr.1.30	The Applicant	In the ES Volume 15, Part 2 [APP-061] Table 7.103 is incomplete. Para *7.30.1 notes that "Junctions that require mitigation are marked with a " ". Junctions where mitigation could be delivered but is deemed not necessary due to overall network performance improvements delivered by the mitigation measures already in place are noted as " "."* **None of these markers appears in the Table and this deficiency should be rectified to provide clarity and avoid confusion.**
		Applicant's Response: The table is reproduced below.

Table **Error! No text of specified style in document.**..1 Mitigation Summary – Existing Junction Performance - Resultant Queues

Junction	AM Peak Queue	PM Peak Queue	Airport Peak Queue	Mitigation
1	-42	-5	+1	✓
2	-168	-104	+4	✓
3	0	0	0	✗
4	-146	-281	-31	✓
5	0	0	0	✗
6	-144	-115	-2	✓
7	-62	-147	-4	✓
8a+8b	+11	+22	+7	✗
9	0	+0	0	✗
10	-2	+1	+1	✓
11	0	+1	+1	✗
12	-80	-203	+32	✓
13	+19	+1	+26	✓
15	-122	-148	-15	✓
16	-83	-92	-83	✓
17	-19	-20	-6	✓
20A+B	-227	-282	-111	✓
21A	-7	-39	-1	✓
21B	-18	+11	-46	✓
23	+1	0	+1	✗

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24	0	0	0	✘
25	+1	+9	0	✘
26	-49	-139	-138	✓
27	-47	-75	-33	✓
28	+2	+6	+2	✘
All mitigation measures identified - Total Queue Difference Network Wide (✓ + ✓)	-1197	-1637	-406	
Proposed Mitigation Package - Total Queue Difference Network Wide (✓)	-1038	-1399	-231	

The junctions where no mitigation is required are marked with an "✘". Junctions that require mitigation are marked with a "✓". Junctions where mitigation could be delivered but is deemed not necessary due to overall network performance improvements delivered by the mitigation measures already in place are noted as "✓".

Tr.1.31	KCC	In the ES Volume 15, Part 2 [APP-061] para 7.30.14 sets out the timing and other arrangements for installing mitigation measures at road junctions. **Is KCC content with these arrangements?**
		Applicant's Response: N/A

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Tr.1.32	The Applicant	**In the ES Volume 15, Part 2 (APP-061] para 7.31.1 Bullet 3 refers to the B5020: this should presumably refer to the B2050 and the reference should be emended to avoid confusion.**
		Applicant's Response: B5020 should read B2050. This is a typographical error.
Tr.1.33	The Applicant KCC	In the ES Volume 15, Part 2 [APP-061] para 7.31.2 refers to works to be undertaken at three junctions in order to improve road safety and notes that two of these are also to be improved on grounds of capacity. **Does the Applicant, with KCC, intend to give priority to the works which will improve road safety?**
		Applicant's Response: Road safety will be a priority for the Applicant when works commence on the construction activities at Manston Airport and the associated highways works will give the highest consideration to this matter. The phasing of improvement works will be identified in conjunction with KCC and would be based on capacity trigger points, timing of road space booking as well as road safety requirements. For example, the timing of the Spitfire Way/Alland Grange Lane road safety junction improvement may be timed to take place during the same period as the Spitfire Way widening works.
Tr.1.34	The Applicant	In the ES Volume 15, Part 2 [APP-061] para 8.4.1 states "*To understand impacts on the HE network a series of assessment points were requited across the various roads*." **Explain the meaning of the word 'requited' in this context or is this a typo?**

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		Applicant's Response: This is a typographical error that should read 'required'.
Tr.1.35	HE	In the ES Volume 15, Part 2 [APP-061] Section 8 deals with traffic impacts from the development on the motorway and trunk road network. **Is Highways England content with the methods of analysis used and the conclusions of the analysis set out in Paras 8.5.3 and 8.5.4?**
		Applicant's Response: N/A
Tr.1.36	The Applicant KCC TDC	In the ES Volume 15, Part 2 [APP-061] Section 10 deals with sensitivity testing for possible changes resulting from the adoption of the TDC local plan. The potential for changes to the measures proposed for improvement and mitigation to alter as a result of this sensitivity testing is identified. **At what stage, if at all, will these changes be made?**
		Applicant's Response: Since the DCO submission, further traffic modelling work has been undertaken using the Thanet Strategic Transport Model (TSTM). The TSTM includes the traffic generation from the proposed site allocations in the draft Thanet Local Plan and the transport interventions identified in the draft Thanet Transport Strategy and Policy 47 in the Thanet Local Plan.

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		As a result, a revised Transport Assessment is being prepared. Where there are material increases in traffic, mitigation measures are proposed so that there will be no detrimental effect. The updated Transport Assessment is expected to be provided by Deadline 4.
Tr.1.37	The Applicant KCC	The ES Volume 15, Part 2 [APP-061] contains Appendices A to D of the ES, with Appendix A giving consultation meeting notes. This question relates to information included in this Appendix. Various points were raised by KCC in a letter to the Applicant dated 21 September 2017 about a scoping document of July 2017. **Have all the issues raised been resolved to the satisfaction of KCC?** In a letter dated 16 February 2018 KCC provided a response to the Applicant's second statutory consultation. In this reference was made to a letter of 21 July 2017 containing the KCC response to the first consultation and indicating that the information in both responses should be considered together. The second letter, of 21 July 2017, is not included in the bundle and should be produced. **Have all the issues raised in it been resolved to the satisfaction of KCC?** The KCC responses to the traffic and transport issues raised in the PEIR are included as Appendix 2 to the letter of 16 February 2018. **Have all the issues raised in it been resolved to the satisfaction of KCC?**
		Applicant's Response: The Applicant has undertaken further consultation with KCC in the pre-examination period to address the responses provided by KCC during consultation periods.

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		This has included addressing the following which are the main concerns of KCC: • Trip generation and distribution methodology – agreement has been reached on this. • The Manston Haine Road – an alternative route alignment has been identified and agreement is being sought with KCC on this. • Strategic traffic modelling – the Applicant has commissioned the use of the Thanet Strategic Transport Model to assess the impact of the Proposed Development on the Thanet road network. This includes the local Plan growth and the interventions identified in the draft Thanet Transport Strategy. A revised Transport Assessment is being undertaken which uses the traffic data from the model outputs to reassess the junctions and links and to identify appropriate mitigation to address any significant effects as a result of the Proposed Development. This will be set out in the Statement of Common Ground with KCC which the Applicant hopes to provide for Deadline 4.
Tr.1.38	The Applicant	The ES Volume 25, Part 2 [APP-072] notes at Para 2.2.1 that *"At this stage in the project it has been assumed that there is no requirement for any Abnormal Invisible Load (AIL). Therefore, the movement of AIL has not been assessed in this Preliminary CTMP".* **A typo presumably?**
		Applicant's Response: This is a typographical error that should read 'Indivisible' (load that can't be split down into smaller loads).
Tr.1.39 (NUMBER	The Applicant	The ES Volume 25, Part 2 [APP-072] notes at Para 3.8.1 that *"Sub- Contractors will be provided with copies of this CTMP and comply with it in full."* **How will this be achieved, monitored and enforced?**

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USED TWICE)		Applicant's Response: Sub-contractors will be required through their contractual obligations to comply with all provisions of the CTMP. The CTMP is required as part of the CEMP, compliance with which is secured through requirement 6 of the dDCO [APP-006].
Tr.1.39 (NUMBER USED TWICE)	The Applicant Department for Transport Highways England KCC	**What effect will the application have on the implementation of measures under Operations Stack and Brock (or any later iterations)?**
		Applicant's Response: Following discussions with the DfT and assurances that they will not require the site beyond the calendar year of 2020, the Applicant is confident that Operation Stack / Brock will not prejudice the delivery of the Proposed Development and nor would the Proposed Development prejudice Operation Stack / Brock.
Tr.1.40	KCC The Applicant	**PRoW** Para 2.3.5 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) cites a chance meeting with a local resident. **Have the Applicant or KCC carried out any other more evidenced studies of current usage of the sections of the potentially affected PRoWs?**
		Applicant's Response: The Applicant has not undertaken any other studies of current usage of the sections of the potentially affected PRoWs.

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		It should be noted that proposed closure and diversion of a section of TR8 does not result in additional distance. The short section of TR9 that is proposed to be closed does not connect to other walkable routes as such, and as provision is retained no further studies were considered relevant.
Tr.1.41	The Applicant	**PRoW** Para 2.3.5 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) cites "*Heather from KCC*". The ExA assume that this refers to Heather Waller, The East Kent Area Officer-Public Rights of Way & Access Service, KCC. **Is this assumption correct?**
		Applicant's Response: This is correct, 'Heather from KCC' refers to Heather Waller as set out in the meetings notes appended to the PRoWMS.
Tr.1.42	KCC	**PRoW** Paragraph 3.2.1 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) states that: KCC East Kent Area Officer for PRoW & Access Service has been consulted regarding the Proposed Development. **i. Comment on the proposals as set out in the 'Public Rights of Way Management Strategy'; and** **ii. confirm or otherwise its formal agreement to them.**

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		Applicant's Response: N/A
Tr.1.43	The Applicant	**PRoW** Paragraph 3.2.1 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073] states that: "*KCC requested that PRoW are to be created and funded under a Section 106 Agreement and would be maintained by KCC while remaining part of Manston Airport land. It should be noted however, that the power to undertake any mitigation work required would be established under the powers of the DCO*." **Indicate where in the dDCO this power is included.**
		Applicant's Response: Article 3 of the dDCO [APP-006] provides for the undertaker to be granted consent to construct the "authorised development". The authorised development is defined in article 2 of the dDCO as "the development and associated development described in Schedule 1 (authorised development) or any part of it, which is development within the meaning of section 32 (meaning of development of the 2008 Act". Schedule 1 describes the various elements of the authorised development (both NSIP and associated development. Item h) of the further development listed in the Schedule 1 authorises "…works associated with the provision of ecological mitigation and other works to mitigate any adverse effects of the construction, maintenance of operation of the authorised development" within the Order limits. The Applicant proposes to divert and replace one PRoW at its own expense as required in article 13 and the responsibility for the maintenance of this will remain with the highways authority.

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		Any mitigation outside of the Order limits is not authorised by the Order but, pursuant to Requirement 8(1) in Schedule 2 of the dDCO, no part of the scheme can commence until the details of both off-site and on-site mitigation, its monitoring and management have been submitted to and approved by the Secretary of State, in consultation with Natural England. Before giving this approval the Secretary of State must be content that the undertaker has the ability to implement both the off-site and on-site mitigation. Requirement 8(2) provides that the ecological mitigation must then be implemented, monitored and managed by the undertaker in accordance with the written details approved under Requirement 8(1).
Tr.1.44	KCC The Applicant	**PRoW** Paragraph 3.2.1 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) states that: "*KCC requested that PRoW are to be created and funded under a Section 106 Agreement and would be maintained by KCC while remaining part of Manston Airport land*." **i. Confirm or otherwise that any agreement will be made a Development Consent Obligation under s174 of PA2008 of the 2008 Planning Act (PA2008); and** **ii. report on progress in developing this agreement.**
		Applicant's Response: The Applicant does not consider that an agreement under s.106 of the 1990 Act (as amended by the 2008 Act) as proposed by KCC is necessary in this instance. Article 11 of the dDCO [APP-006]) provides that:

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		(1) Any street to be constructed under this Order must be completed to the reasonable satisfaction of the local highway authority in whose area the street lies and, unless otherwise agreed with the local highway authority, must be maintained by and at the expense of the local highway authority from its completion. *(2) Where a street is altered or diverted under this Order, the altered or diverted part of the street must, when completed to the reasonable satisfaction of the street authority in whose area the street lies and, unless otherwise agreed with the local street authority, be maintained by and at the expense of the local street authority from its completion.* 'Street' for the purposes of this article means *"a street within the meaning of section 48 of the 1991 Act…"*. Section 48 of the 1991 Act includes any *"highway, road, lane, footway, alley or passage"*. Therefore, a PRoW is captured by this article. Additionally, article 13(2)(1) of the draft DCO [APP-006] provides that no public right of way as specified in Schedule 3 is to be stopped up unless "*the new public right of way to be constructed and substituted for it … has been completed to the reasonable satisfaction of the street authority and is open for use*". As such, the draft Order already provides that any such PRoW is to be completed to the reasonable satisfaction of Kent County Council as local highway authority, and that it will unless agreed otherwise be maintained at their expense. It should also be noted that the proposed diversion route is shorter than the existing route and as such maintenance of the path in the future should be no more than they are currently. ii. An agreement is not necessary since the diversion is contained in the application and will not be procured separately.
Tr.1.45	The Applicant	**PRoW** Paragraphs 4.3.3 and 4.3.4 of the 'Framework Travel Plan' (Appendix L in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O [APP-072]) state that:

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		"*...the airport is situated sufficiently close to major population centres of East Kent to make walking and cycling for staff members a viable alternative to the car. [...] To facilitate this, retention, enhancement and optimisation of the existing PRoW network is required*." **Demonstrate how the proposals for, inter alia, extinguishing and diverting PRoWs contained in the 'Public Rights of Way Management Strategy' facilitate this.**
		Applicant's Response: The highlighted statement is not a true reflection of the opportunities that the PRoW provide to access the Proposed Development by foot or cycle. The purpose of the proposals for extinguishing and diverting PRoWs are to ensure that the existing provision is replicated, where required. As such changes will be made to this paragraph in the updated Transport Assessment which is expected to be submitted by Deadline 4.
Tr.1.46	KCC The Applicant	**PRoW** Paragraph 4 of 'Appendix A - Site visit undertaken on 31 of October 2017 - Meeting minutes' in the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) states that: "*Currently, PRoW applications take about 2.5 years to be looked at by KCC. That timescale is likely to soon reach 3 years. If, however, the submission is classed as Nationally Significant Project, that timeframe may possibly be shorter*." Table 3.1 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) states in relation to TR8 that:

Ref No.	Respondent	Question
		"*The previous route will be permanently closed and the new route permanently established. This will be done early in the project life cycle so it is established before major works take place*." **i. Comment on the apparent discrepancy between the timelines for the PRoW application and the commitment to undertake this action early in the project life cycle; and** **ii. Show where the need for this consent is referenced in 'Details of Other Consents and Licences that may be required' [APP-087]**
		Applicant's Response: i. The text is from meeting notes and was part of an early discussion with the relevant public rights of way officer who was setting out the standard way in which PRoW closures and diversions can be secured and the time frames this may take and did not consider the DCO requirements. The PRoW changes will be secured under the powers of the DCO and the timeframes set out by KCC in the text is not relevant as the PRoW changes can be undertaken early in the project lifecycle. ii. This is not required, the consents are within the powers of the dDCO (Work No. 24) [APP-006].
Tr.1.47	KCC Network Rail	**PRoW** Paragraph 4.1.6 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) states in connection with a strategy to create a new link between Thanet Parkway Station and TR9 that:

Ref No.	Respondent	Question
		"[The] Creation of a new link around the eastern boundary of the proposed Airport redevelopment will not be progressed. This however could be potentially addressed by a bus service providing a north south link should the planned Thanet Parkway Station go ahead." **Comment on this proposed decision in relation to any proposals for Thanet Parkway Station.**
		Applicant's Response: N/A
Tr.1.48	The Applicant	**PRoW** Paragraphs 2.2.1 and 4.1.1 of the 'Public Rights of Way Management Strategy' (Appendix M in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O 3/3 [APP-073]) refer to Figure 2.1 and paragraph 2.2.3 refers to Figure 2.2. Figure 2.1 in this volume is 'CAA 2014 Survey – Modal Share' and Figure 2.2 is 'Passengers per Year vs Total Parking Space – UK Airports Comparison'. **Either:** **i. Indicate where figures 2.1. and 2.2 may be found; or** **ii. provide a copy of each of them.**
		Applicant's Response: ii. The Applicant can confirm that a copy of each of these figures is provided at Deadline 3 as Appendix Tr.1.48 in TR020002/D3/FWQ/Appendices.

Ref No.	Respondent	Question
Tr.1.49	The Applicant	**PRoW** Paragraph 2.5.6 of the 'Framework Travel Plan' (Appendix L in the Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O [APP-072]) refers to Figure 2.5. **Either:** **i. Indicate where Figure 2.5. may be found; or** **ii. Provide a copy of it.**
		Applicant's Response: The Applicant can confirm that a copy of this figure is provided at Deadline 3 as Appendix Tr.1.49 in TR020002/D3/FWQ/Appendices.