



The Planning Act 2008

Sizewell C (SZC)

Planning Inspectorate Reference: *EN010012*

Deadline 3 – 24 June 2021

East Suffolk Council's (20026200) Response to SZC Co.'s responses to Examining Authority's First Round of Written Questions

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East Suffolk Council has only included questions and answers in the table where we have a specific comment to make in response.

Examining Authority First Written Questions					
ExQs 1	Question to:	Question:	East Suffolk Council's (ESC) Response	Summary of SZC Co. response	ESC Response to SZC Co. response based on submissions at D2
G.1 General and Cross-topic Questions					
G.1.0	The Applicant	As drafted the DCO has no limitation on the depth to which works could be undertaken. Please explain how this aligns with the assessment carried out within the ES. In order to reflect the assessment within the ES does the DCO not require a maximum depth of excavation – with a potential for a limit of deviation? If this is not considered to be necessary, please explain how the ES has assessed the potential effects of unlimited excavation.	ESC shares the ExA's concerns in relation to the apparent lack of limits of deviation in the draft DCO [APP-059]. As currently drafted, Article 4 allows for unlimited vertical limits of deviation, except for works 4C, 11 and 12 for which there are some restrictions. This is troubling as it appears to potentially allow works of any vertical limits of deviation, potentially without this having been environmentally assessed. ESC would welcome an explanation from the Applicant about how, if there are to be restrictions, these are to operate, and if there are not any restrictions, how the extent of excavations has	SZC Co. answer – limited by R 8	<p>ESC's view is that Requirement 8 appears to relate only to Work No.1. It limits the building and use of the buildings comprised in Work No.1 to be in 'general accordance with' the Construction Method Statement and the Main Development Site Construction Parameter Plans.</p> <p>Firstly, ESC queries the use of the term, 'in general accordance' and considers that this is too vague for a commitment to be meaningful and would welcome the wording being amended to 'in accordance'.</p> <p>In addition, although ESC can see that the Main Development Site Construction Parameter Plans (as submitted for Deadline 2: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010012/EN010012-004671-D2%20-%20Sizewell%20C%20Project%20-%20Other-%20Updated%20Main%20Development%20Site%20Construction%20Parameter%20Plans.pdf) do show some heights, these relate to 'height and working parameters required during the construction phase'</p>

			been environmentally assessed.		<p>and do not relate to finished building heights. The plans also identify 'general' and 'exceptional' condition heights which vary substantially and ESC has not been able to find an explanation of this within the application documents. Could the Applicant please provide a further explanation of this?</p> <p>ESC also considers that the Applicant has not responded to question G.1.0 in full. The question appears to require information on the depth of excavation which the Applicant's answer does not appear to cover.</p>
G.1.42	The Applicant	In [AS148] Table 2 refers to how Article 3 and 4(1)(a) set vertical limits to control the parameters of development. (i) Please explain how this would be achieved for each of the associated development sites where there are no parameters plans and are not specifically covered by these articles except for	ESC shares the ExA's concerns in relation to the absence of limits of deviation and refers the ExA to its response to question G.1.0.	The ExA is referred to Appendix 14I – DCO Drafting Note 9 of the written responses.	ESC maintains its previous position. Despite the Applicant's Drafting Note 9 submitted for Deadline 2 which seeks to explain the Applicant's approach to limits of deviation, ESC considers that the approach to any committed limits of deviation remains unclear. ESC would like to see Article 4 drafted so that it directly ties the limits of deviation to a distinct set of plans where these limits, both horizontal and vertical, are shown.

		<p>Work No. 4C, Work No. 11 and Work No. 12. (ii)</p> <p>Is it not fairer to say that there are no vertical limits of deviation in these locations as parameter plans have not been provided and as the DCO is currently drafted?</p> <p>As this document is intended to be a signposting document to aid the public's understanding of the DCO, is this a fair representation to them?</p>			
G.1.43	The Applicant	<p>In [APP 451] SLR, Noise and Vibration para 4.6.40 the ES seeks to explain that a parameters approach has been adopted, and this is duplicated in para</p>	<p>As the local authority who would deal with any noise complaints, ESC is eager to ensure that noise and vibration has been correctly assessed in the ES and that this translates into appropriate control measures in the draft DCO. It would welcome an</p>	<p>The vertical limit of deviation of 1m applicable to the Sizewell Link Road (Work No. 12) and Two Village Bypass (Work No. 11) are secured in the Draft DCO (Doc Ref. 3.1(C)) by article 4(1)(b).</p>	<p>No further comment.</p>

		4.6.37 of [APP 415] (TVB Noise and Vibration) . Both Chapters appear to rely on a limitation of vertical deviation of 1m. Please show where this is set out and secured in the DCO.	explanation from the Applicant as to how this is to be achieved.		
G.1.45	The Applicant, All relevant local authorities, EA	<p>Code of Construction Practice</p> <p>The CoCP [AS 273] sub heading m) indicates SZC Co. would hope to lead on complaints. Please explain how this would be undertaken to respect privacy and comply with the GDPR as well as enforcing authorities' responsibilities to investigate complaints.</p>	<p>Paragraph 3.1.45 – 3.1.49 of the CoCP [AS-273] does reference SZC Co. as taking responsibility for all enquiries and complaints.</p> <p>However, ESC, as a statutory investigating authority for planning and noise complaints is not able to hand this responsibility to the Applicant. Statutory complaints will therefore continue to be investigated by ESC in consultation with the Applicant where appropriate.</p> <p>Minor complaints or queries that are considered by ESC to be better dealt with by</p>	<p>All complaints are and will continue to be recorded and monitored through the 'Tractivity' database used by SZC Co. and personal data will be processed in accordance with SZC Co.'s privacy policy, which ensures compliance with the GDPR. The privacy policy is available here: https://sizewellcdco.co.uk/privacy-notice-and-policy/ . It is, and will continue to be reviewed regularly and updated as necessary. SZC Co. will monitor, record and provide information on</p>	No further comment.

			<p>the Applicant, will be referred to the Applicant following a process to be agreed. At 3.1.47 [AS-273] the Applicant acknowledges that ESC may also respond where it has overall responsibility.</p> <p>ESC, upon taking a call that is considered better dealt with by the Applicant would re-direct the caller to the Applicant thus avoiding any compromise of our own published privacy and GPDR requirements.</p> <p>If a caller is making a complaint that ESC has a duty to investigate under our statutory responsibilities, then we will do so in accordance with our existing privacy and GPDR requirements.</p> <p>Although article 10 of the draft DCO proposes some limitations on the scope of statutory nuisance proceedings (see also the response to DCO.1.28</p>	<p>complaints monthly to relevant authorities via the communications teams. This would not disclose any personal data that could breach the GDPR.</p>	
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			<p>below)the duty remains placed upon ESC under S.79 of the Environmental Protection Act 1990 to investigate complaints of statutory nuisance received. ESC will still be responsible for enforcing the DCO and associated documents to ensure that agreed criteria are being complied with and this will rely partially on involvement in the complaints process. It is likely that we would require notification of complaints and regular updates on investigation and actions taken on complaints received directly by Sizewell C, we would also liaise with Sizewell C about complaints received directly by us in our role as the regulatory authority in respect of the DCO and relevant legislation. ESC would disagree that SZC Co would “lead” on complaints although their role in investigating and resolving them is critical. On a project of this scale and scope we would be envisage</p>		
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			that there would be a collaborative approach in dealing with complaints to efficiently resolve matters arising but ultimately, we are the regulating authority for many matters including the DCO itself. In terms of reconciling any information sharing with Sizewell C this would have to be compliant with the GDPR and would not occur if it were otherwise.		
G.1.53	ESC, SCC, EA, Natural England	<p>Code of Construction Practice (CoCP)</p> <p>The CoCP would be an important part of the mitigation strategy for dealing with and controlling potentially adverse effects from the various construction activities. Do you consider that as drafted it is sufficiently robust and precise and</p>	<p>Noise and Vibration:</p> <p>In terms of noise and vibration we do not currently consider the draft CoCP [AS-273] to be sufficiently robust and precise and consequently enforceable. We are however in continuing discussion with the Applicant in respect of matters of concern.</p> <p>Ecology:</p> <p>As drafted the CoCP does not currently capture all of the appropriate ecological mitigation measures, for example relating to the most recently submitted</p>	The CoCP (Doc Ref. 8.11(B)) includes precise controls that provide clarity on the measure, scope and timing for each commitment relied on by the ES. Given the scale and complexity of the construction process there may be instances where minor derogations are needed, or where more than one set of controls apply to a specific set of works and there may be ambiguity over which control takes precedence where a conflict may exist.	No further comments.

		consequently enforceable?	<p>mitigation strategies for bats and otters. Please see the LIR [REP1-045] for more detailed comments on this. The current draft CoCP does not fully capture the ecological mitigation strategies necessary for some of the Associated Developments, including the Two Village Bypass, please see our LIR for comments in relation to this.</p> <p>Given the importance of the CoCP as the mechanism for securing delivery of many of the necessary construction ecological mitigation measures, it is essential that they are correctly captured within the document.</p> <p>Air Quality: There are matters within the CoCP that are still under discussion and as such the document is still evolving and further discussion will be required around mitigation measures.</p>	<p>These limited instances mean that a degree of flexibility is therefore both necessary and appropriate.</p> <p>The proposed governance and monitoring arrangements secured will then ensure that ESC, SCC, the EA and NE will have sufficient oversight of the Project to ensure that relevant measures and commitments can be monitored and enforced.</p>	
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			In terms of air quality, we do not currently consider the CoCP to be sufficiently robust, precise and consequently enforceable. We are however in continuing discussion with the Applicant in respect of matters of concern.		
AG.1 Agriculture and Soils					
AG.1.4	ESC, Natural England	<p>Impact Assessment The temporary compounds associated with the Saxmundham to Leiston branch line rail improvement works have not been included in the agriculture and soils assessment [APP563].</p> <p>Please confirm if you are satisfied with this approach?</p>	<p>ESC recommends that all potential impacts, including those relating to the proposed temporary compounds, should be fully assessed as part of this DCO Application.</p> <p>The Applicant acknowledges in Section 10.3.10 of ES Volume 9, Chapter 10 Soils and Agriculture assessment [APP-563] that <i>'the screening exercise has also considered the potential for the proposed rail improvement works on the Saxmundham to Leiston branch line to result in environmental effects which could be significant'</i> however have concluded that <i>'as these works would be limited to</i></p>	For information, Volume 9, Chapter 10 of the ES [APP-563] states that these have been scoped out due to their small size (each being approximately 0.5ha in size) and the shortterm use of these before the land would be reinstated. The assessment considers that this would result in negligible impacts on agricultural land or operations.	No further comment.

			<p><i>the renewal of the track using new ballast, flat bottom continuously welded rail and concrete sleepers and would take place within the existing railway corridor, <u>with the exception of the temporary compounds</u>, the works are unlikely to impact on agricultural land or operations’.</i></p> <p>It is noted from Table 10.1 within [APP-563] that each temporary compound would have an approximate footprint of 0.5Ha and would be located on adjacent land. ESC is therefore not satisfied with the approach taken by the Applicant on this matter. The temporary compounds are not located within the existing railway corridor and potential impacts should therefore have been assessed.</p> <p>Further justification should be provided by the Applicant if their position not to include these structures in</p>		
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			the assessment is maintained.		
AG.1.1.3	The Applicant	<p>Soil Management</p> <p>ESC note that dust nuisance is likely to be minimal with the proposed mitigation in place [RR-0304]. ESC has however requested that stockpiles and earth bunds are turfed and fenced/screened in locations which are within 350m of sensitive human health and ecological receptors to minimise wind whipping of loose bund or stockpile material. Please provide a response to this request including confirmation of how any such commitments</p>	n/a	<p>As outlined in IAQM guidance³⁶, the seeding of stockpiles and earth bunds, or other measures to reduce dust and run-off, are appropriate where stockpiles or bunds are to be left in situ for extended periods or where they are located close to site boundaries or sensitive receptors. As outlined in the dust management plan within the CoCP (Doc Ref. 8.11(B)), seeding of stockpiles or earth bunds, or other appropriate measures such as fencing or screening will be undertaken at sensitive site boundaries with early planting used where possible. This will be secured through the detailed Dust Management Plan to be prepared under the CoCP (Doc Ref. 8.11(B)) and discharged by requirement. Turfing of stockpiles or bunds is not proposed</p>	<p>ESC has requested screening/fencing of stockpiles. The CoCP does not go far enough in this regard. This matter is under discussion between ESC and the Applicant.</p>

		would be secured.			
AG.1.1.1.5	The Applicant	<p>Dust management Please provide a response to the issues raised regarding dust management for spoil heaps and stockpiles [RR-0960, RR-0181, RR-1230, RR-0636, RR-577, RR-1162, RR-319].</p>	n/a	<p>The dust management plan, including proposals for monitoring and mitigation based on best practice measures, has been informed by the risks identified through the dust impact assessment. The dust impact assessment includes consideration of the materials to be stockpiled, and the heights and orientation of the stockpiles. The best practice mitigation measures outlined in the IAQM guidance³⁷ have a long history of successful implementation in the UK. Dust monitoring measures will be specified within the Dust Management Plan and monitoring results reported monthly to the Suffolk County and East Suffolk Council.</p>	<p>ESC requests acknowledgment of the scale, nature and location of dust-generating activities in the specification of dust mitigation measures. The CoCP does not go far enough in this regard. This matter is under discussion between ESC and the Applicant.</p>
AG.1.1.2.2	The Applicant	<p>Code of Construction Practice In [RR-0304] ESC requested that the CoCP should specify that dust</p>	n/a	<p>As described in Table 12.17 of Volume 2, Chapter 12 (Air Quality) of the ES [APP-212], the surface stripping associated with earthworks in Zone A is identified to require activity specific mitigation.</p>	<p>ESC welcomes this confirmation and requests that it be added to the CoCP.</p>

		deposition monitoring is required when soil stripping is undertaken within proximity of sensitive receptors. Please provide a response.		Monitoring would be undertaken such that applied mitigation is proportionate and effective . Based on the potential risk associated with this activity therefore, dust monitoring will be undertaken before and during this activity. Monitoring results will be reported monthly to the Suffolk County and East Suffolk Council as per the CoCP (Doc Ref. 8.11(B)).	
AQ.1 Air Quality					
AQ.1.3	ESC	Dust emissions Do you agree with the findings of the ES that the only potential source of significant air pollution would arise from construction dust?	This is not agreed. Construction phase ESC agrees that potentially significant sources of air pollution will occur during the construction phase, but it has not yet been demonstrated that construction dust is the only potentially significant source of air pollution. ESC considers that it will be possible to limit the impacts of construction dust through mitigation so that they are insignificant. This was identified by the Applicant	The assessment has considered air quality effects from various emission sources including construction dust, construction traffic, NRMM, and operational emissions.	ESC stand by our original response.

			<p>within Volume 2, Chapter 12, Table 12.21 [APP-212], where residual risk after mitigation is low to negligible. The proposed mitigation is appropriate but may not be sufficient to achieve a negligible impact. Discussions between ESC and the Applicant are ongoing to finalise construction dust mitigation to ensure impacts are negligible (see Paragraphs 19.25 to 19.29 in the LIR [REP1-045]).</p> <p>ESC is in discussion with the Applicant regarding the minimisation and management of emissions from NRMM during construction. To minimise the impacts of NRMM, a request for the highest available emission standard and a cap on more polluting plant has been made within paragraph 19.3 of the LIR.</p> <p>ESC considers that there is a risk of potentially significant impacts on air quality within</p>		
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			<p>the Stratford St Andrew Air Quality Management Area (AQMA). ESC and the Applicant have held constructive discussions on this matter, and it is likely that this issue will be resolved following further discussion with the Applicant (see LIR section 19.30).</p> <p>Operational phase The proposed development will require the use of emergency diesel generators (EDGs). It is expected that EDGs will be addressed appropriately through the environmental permitting regime. In the event that this does not occur, ESC may seek further controls on EDGs through the DCO process (LIR Table 19).</p>		
AQ.1.7	ESC	<p>Dust emissions Are you confident the baseline monitoring locations chosen for assessing the significance of dust emissions arising from the</p>	<p>No, baseline dust monitoring locations presented within Appendix 12E, Plate 1.2 [APP-214] do not necessarily represent worst-case receptor locations. Construction dust assessment figures in Appendix 12A, figures 12A.1,</p>	<p>(i) The baseline dust emissions monitoring sites were selected to inform the construction dust assessment with respect to the background dust deposition in the main development site area, in particular where there may be a history of dust generating</p>	ESC stand by our original comment.

		<p>main development site would satisfactorily provide sufficient information such that appropriate standards can be monitored managed and mitigated to safeguard health and amenity for local receptors?</p>	<p>12A.4 and 12A.5 [APP-213] do not show dust deposition monitoring representative of Minsmere SPA/SAC, Sizewell Marshes SSSI, or human health receptors such as LE47 for main development site activities and trackout. In figure 12A.2, which is representative of activities associated with the main crag stockpile, site 5 is representative of worst-case ecological receptors. However, LE25 which is the worst-case human health receptor does not have a dust deposition monitoring location. For figure 12A.3, which represents lime spreading, worst-case monitoring has not been captured at human health receptor LE25, whereas the closest ecological site Minsmere is well represented with site 7. Please note that for matters relating to Statutory designated nature conservation sites we defer to Natural England for more detailed advice.</p>	<p>activities, in accordance with IAQM guidance⁴³. These locations include background sites for agricultural-source dust and salt/sand from coastal processes, as described in paragraphs 1.2.2 and 1.2.8 of Volume 2, Appendix 12E of the ES [APP-214].</p> <p>(ii) No baseline monitoring was undertaken at Land East of the Eastlands Industrial Estate, Valley Road or Bucklewood Road as these locations were judged to be represented by the baseline monitoring in other areas. The outline Dust Management Plan (Table 1.1, Volume 1, Appendix 12A of the ES, [APP-213]) describes measures for dust monitoring. Baseline dust monitoring for identified receptors would be carried out prior to commencement of activities as detailed within Dust Management Plan secured by the measures set out in table 4.1 of the CoCP Part B (Doc</p>	
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			<p>At this stage, it may not be possible to be prescriptive about the specific locations where baseline and construction phase monitoring should be carried out. This is because exact construction details may not be known e.g., confirmation of which haul routes will be hard-surfaced. ESC recommends that a requirement for a minimum number of monitoring locations, and a minimum time period for monitoring during construction activities should be specified, to be agreed at the CoCP/Dust Management Plan/CEMP stage. This should include a requirement for the Applicant and contractors to propose and agree specific locations with ESC as part of the CoCP/Dust Management Plan/CEMP.</p> <p>The Applicant has made a commitment to monitor and take corrective actions during construction works</p>	Ref. 8.11(B)).	
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		<p>(Table 1.1 of Appendix 12A) [APP-213]. As such the Applicant's current baseline dust monitoring is not critical for control of dust impacts. It is expected that dust deposition and particulate monitoring locations will be agreed at the CEMP stage.</p> <p>There are not considered to be satisfactory mechanisms within the CoCP to ensure that corrective actions will be taken if dust deposition and particulate concentrations thresholds are exceeded. ESC requests that this be included within the CoCP. Further to this, paragraph 2.3.8 of the CoCP only requires the Applicant to approve contractors' construction environmental management plans (CEMP) [AS-273]. This should be amended to also require approval by ESC.</p> <p>ESC has made other requests in paragraphs 19.25 through to 19.29 of the LIR [REP1-</p>		
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			045] to strengthen mitigation requirements.		
AQ.1.1 9	ESC	Approach (i) Is the Council satisfied with the overall approach of the Applicant to dealing with Air Quality? (ii) Do the Council have any specific criticisms it would like to make?	(i) ESC is satisfied with the overall approach. The Applicant has been in regular contact with ESC in pre-application and since submission. Many of ESC's concerns with regard to potential air quality impacts and how they should be assessed have been addressed. ESC and the Applicant have discussed and recorded approximately 86 separate comments after reviewing the air quality environmental statement, the majority of which have been addressed. (ii) ESC has a relatively small number of outstanding criticisms. The outstanding points are presented within the LIR Section 19 [REP1-045].	The Applicant and ESC have maintained regular dialogue regarding air quality assessment, predicted effects and proposed mitigation measures. These measures are being agreed through an air quality mitigation plan as detailed in the draft Statement of Common Ground between the Applicant and ESC (Doc Ref. 9.10.12).	The Applicant's responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.
AQ.1.3 4	ESC, SCC, PHE, EA	Dust Soiling (i) Are you satisfied with the suggested mitigation to control the levels of dust arising	(i) ESC is broadly in agreement with the approach to mitigation proposed by the Applicant but has made some further requests for controls in relation to dust mitigation.	The Applicant notes that the approach to dust mitigation has been discussed and is being agreed with the Councils through the air quality	The Applicant's responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.

		from the development? (ii) If not what additional mitigation would you wish to see supplementing the Dust Management Plan, Outline Dust Management Plan or Code of Construction Practice?	(ii) Additional controls requested by ESC are set out in paragraphs 19.25 to 19.29 of the LIR [REP1-045].	mitigation plan, as recorded within the Statement of Common Ground (Doc Ref. 9.10.12).	
AQ.1.3 5	ESC, SCC, PHE, EA, Natural England	Dust Soiling (i) Are you satisfied with the suggested monitoring of dust emissions from the development? (ii) If not what additional mitigation would you wish to see and how do you consider this should be secured?	ESC interprets this comment as referring to <u>monitoring</u> , rather than <u>mitigation</u> of dust. Dust mitigation is addressed in AQ.1.34. (i) ESC is generally satisfied with the dust deposition monitoring proposed within the CoCP. A flexible approach will be needed as the construction programme develops. (ii) Changes to CoCP wording are recommended as per AQ.1.11 [AS-273]. This should strengthen mechanisms for corrective actions following monitored	The Applicant notes that the approach to dust monitoring has been discussed and is being agreed with the Councils through the air quality mitigation plan, as recorded within the Statement of Common Ground (Doc Ref. 9.10.12).	The Applicant's responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.

			exceedances and approval of CEMPs by ESC.		
AQ.1.36	The Applicant	Dust soiling In light of the comments from ESC in [RR-0342] can you confirm that the CoCP will address the need for dust monitoring during soil stripping to protect sensitive receptors? If you don't agree with this approach, please explain why.	n/a	As described in Table 12.17 of Volume 2, Chapter 12 (Air Quality) of the ES [APP-212] , the surface stripping associated with earthworks in Zone A is identified to require activity specific mitigation. Monitoring would be undertaken such that applied mitigation is proportionate and effective. Based on the potential risk associated with this activity, dust monitoring will be undertaken before and during this activity. The monitoring requirement would be secured through compliance with the CoCP (Doc Ref. 8.11(B)) under Requirement 2 of the draft DCO (Doc Ref. 3.1(C)).	As with AG.1.22, ESC welcomes this confirmation and requests that it be added to the CoCP.
AQ.1.40	The Applicant, ESC, SCC	Mitigation (i) The Applicant suggests in paragraph 14.7.79 [APP-224] that if exceeded of dust levels occurs additional mitigation would be adopted –	ESC considers that this is principally a comment for consideration by the Applicant. It is envisaged by ESC that any additional mitigation will be secured through the CoCP and be implemented into each contractor's CEMP. As	(i) The level of mitigation deployed for particular activities and locations has been based on a risk assessment of potential effects. The system is by its nature proactive in identifying the need to apply more mitigation to works tasks with greater potential to	ESC anticipated that the Applicant would provide an explanation of specific further mitigation measures that would be applied in response to question (i). No such explanation was provided by the Applicant. ESC would expect further discussion to agree monitoring and reporting frequencies and processes.

		<p>please explain what this might entail – particularly in light of the commitment within the CoCP to best practice?</p> <p>(ii) How would this additional mitigation be secured? (iii) In the event the threshold of 0.5g/m²/day had been exceeded – what would the consequence be? E.g. would work need to cease until the threshold level had fallen below the agreed level? Please explain the practicalities of what would occur on the ground and how this would be monitored, and the agreed level reached.</p>	<p>per AQ.1.11, the CoCP does not currently have satisfactory wording regarding this matter for corrective actions such as mitigation to be included within a contractor’s CEMP [AS-273]. As such ESC recommends that the CoCP is updated to explicitly state the monitoring exceedance thresholds and that corrective actions should be taken to ensure impacts are brought well below exceedance thresholds.</p> <p>ESC expects the details of corrective actions to be defined by the contractors in the CEMP, once construction details are better understood. As such, ESC requests that CEMPs are agreed with the Council in advance of construction works commencing to ensure that corrective actions are satisfactory.</p> <p>ESC anticipates that mitigation measures may include measures such as</p>	<p>generate dust emissions, and reactive in immediately responding to, visual appraisal of dust generation risks and meteorological conditions. In line with best practice, the dust deposition rate monitoring generates data that initially confirms that management measures are as effective as is expected (i.e. rates below 0.5g/m²/day) and then provides a point of reference to check for any erosion in the margin of ongoing delivery of the same high level of protection. The approach is intended to deliver effective ongoing protection to sensitive receptors, rather than being a short term alert system.</p> <p>(ii) See response to question AQ.1.10, the additional mitigation is secured through compliance with the measures set out within the CoCP (Doc Ref. 8.11(B)). In addition, the mitigation measures will be documented in the Dust Management Plan which will</p>	
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			temporarily halting of dust-generating activities during periods of adverse meteorological conditions, increasing the intensity of interventions such as water spraying, or extending the zones within which specific measures such as road surfacing are implemented. Any such measures would generally be proposed by the Applicant or its agents for consideration and agreement by ESC.	include additional control measures to be employed in the event of for example unfavourable weather conditions. (iii) The dust monitoring results will be collated weekly so works will not immediately link to dust monitoring results. However, the contractor will use visual appraisal of dust levels during works and will increase control measures or mitigation, if required based on the conditions at the time of works. If monitoring results indicate exceedance of the threshold then additional controls will be proposed to and agreed with the Environment Review Group.	
AQ.1.4 1	The Applicant, ESC	Dust Emissions (Rail) (i) ESC in the [RR-0342] at paragraph 2.207 – please clarify if you are seeking screens/fences in	i) The request for screens/fences identified in paragraph 2.207 is targeted to the green rail route [RR-0342]. A similar request was also made for the northern park and ride (RR paragraph 2.168). This may still be	The Applicant notes that the approach to dust monitoring has been discussed and is being agreed with the Councils through the air quality mitigation plan, as recorded within the	The Applicant’s responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.

		<p>relation to general earthworks across the main development site and associated development sites. (ii) Have further discussions progressed identifying the areas of concern? Please advise the ExA where these are and whether an agreed approach to protecting these receptors has now been reached?</p>	<p>pertinent when it comes to development of the CEMP. (ii) During a meeting with the Applicant, it was clarified that there are insufficient receptors for this to be a high-risk location. No further information is sought by ESC in relation to this point.</p> <p>As mentioned previously, a request for the CEMPs to be approved by the Council is proposed by ESC. This will enable the need for screens and fences in this location to be reviewed and agreed once construction details are finalised.</p>	<p>Statement of Common Ground (Doc Ref. 9.10.12).</p>	
AQ.1.4 2	The Applicant, ESC, PHE	<p>Human Health (particulate matter) Paragraph 12.6.11 of [APP-212] suggests that there could be a risk to human health if long term dust generating</p>	<p>Construction mitigation is considered satisfactory to mitigate human health impacts associated with construction dust activities. However, as per paragraphs 19.25 through to 19.29 of the LIR [REP1-045] some recommendations have been made to strengthen mitigation. As mentioned</p>	<p>The mitigation identified is considered to be sufficient to avoid adverse impacts to human health, because the level of mitigation has been defined by the need to mitigate the higher risk of dust soiling impacts at receptors, rather than the lower risk of PM₁₀ impact;</p>	<p>CoCP to be updated in accordance with our original answer.</p>

		activities increase the baseline level within a receptor area. Do you consider the mitigation identified would be sufficient to avoid adverse effects to human health?	<p>within ESC’s response to AQ.1.40, wording alterations to CoCP dust monitoring and agreement of CEMP with ESC should be included.</p> <p>Any increase in exposure to PM_{2.5} would have an additional effect on human health, as there is no threshold for these effects. However, smaller increments in PM_{2.5} have progressively smaller effects on health. Provided the controls on dust requested in the LIR are implemented, ESC considers that the controls on particulate matter due to dust generating activities would be sufficient to avoid significant adverse effects on human health.</p>	<p>and such mitigation would also lessen the risk of potential PM₁₀ impact, as described at paragraph 12.6.12, and Table 12.16, Volume 2, Chapter 12 (Air Quality) of the ES [APP-212].</p> <p>As detailed in Volume 2, Chapter 12 of the ES (for main development site) [APP-212]; Chapter 5 of Volumes 3-9 of the ES (for associated developments) [APP-357, APP-387, APP-418, APP-454, APP-487, APP-517 and APP-548] and the CoCP (Doc Ref. 8.11(B)), localised changes in air quality during construction, are temporary; associated with specific activities; and not of a concentration or exposure sufficient to quantify any measurable adverse health outcome at any receptor.</p>	
AQ.1.4 5	The Applicant, ESC	Stratford St Andrew AQMA Please advise on the latest position in respect of the assessment of air quality in the	Mitigation proposed by the Applicant sufficiently minimises the likelihood of significant impacts. Provided this is satisfactorily secured in the CoCP or other documents, this is	The Applicant notes that the robustness of the assessment in the Stratford St Andrew AQMA has been discussed and is being agreed with the Councils through the air quality	The Applicant’s responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.

		Stratford St Andrew AQMA and whether the assessment is now considered robust indicating whether there remain concerns on the assessment undertaken or whether the additional sensitivity testing has now resolved any concerns in this area.	considered robust and ESC would not have further concerns regarding this issue. Refer to paragraph 19.1 of the LIR [REP1-045] for further details.	mitigation plan, as recorded within the Statement of Common Ground (Doc Ref. 9.10.12).	
AQ.1.4 7	The Applicant, ESC	Stratford St Andrew and Woodbridge AQMA (i) In light of the proposed development do you agree that both AQMAs would remain within legal limits assuming the worst-case scenarios for traffic movements? (ii)	(i) The management and mitigation of HGVs and associated emissions to air is still under discussion between ESC and the Applicant. It is difficult to accurately forecast air quality trends within the AQMAs in the light of wider issues such as the effect of Covid-19 epidemic and lockdowns on traffic movements and vehicle fleets. However, it seems likely on balance that both	i) Sensitivity testing has been undertaken to support the assumptions of the transport emissions assessment. No exceedances of air quality standards are predicted in the AQMAs as a result of the development, as reported in the Volume 3, Appendix 2.7.C (Transport Emissions Assessment) of the ES Addendum [AS-127] . ii, iv) Ongoing discussions are being held with ESC regarding an agreed management and	The Applicant's responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here. The Applicant notes that <i>“It is agreed between the Applicant and ESC that NO2 monitoring undertaken by the Council will continue to be supported financially by SZC Co.”</i> ESC will discuss further with the Applicant to confirm the level of support envisaged.

		<p>Is there an agreed management and monitoring approach through the lifetime of the project? (iii) How will traffic from other projects be taken into account to ensure that air quality standards will be maintained? (iv) In the event there is congestion on the A12 what would be in place to monitor this, and ensure air quality remained within acceptable levels within Woodbridge and Stratford St Andrew AQMAs but also would not adversely affect other areas? (iv) What would be in place to secure appropriate mitigation?</p>	<p>AQMAs will remain within legal limits, particularly with the Applicant's commitment to Euro VI targets. Provided appropriate mitigation of HGV emissions is satisfactorily secured in the CoCP or other documents, ESC considers that the impacts of the proposed development within both AQMAs would remain acceptable. The worst case has been assumed to be the early years traffic scenario before the Two Village bypass is completed. However, as a precautionary measure the number of HGVs passing through the AQMA should be capped until such time as the Two Village bypass is open for use.</p> <p>(ii) The pre-submission details shared by the Applicant with ESC suggest an acceptable mitigation strategy.</p>	<p>monitoring approach. It is agreed between the Applicant and ESC that NO₂ monitoring undertaken by the Council will continue to be supported financially by SZC Co.</p> <p>iii) A detailed assessment of the cumulative effects of transport emissions in combination with other schemes (including SPR EA1N and EA2) has been undertaken, the results of which are presented in Volume 1, Chapter 10 (Project-wide, Cumulative and Transboundary Effects) of the ES Addendum [AS-189]. No significant effects or exceedances of air quality standards are predicted. Once SZC is constructed and operational, it will become part of the baseline to be considered by future projects thereafter. Similarly, projects coming forward now should take into account the predicted effects of SZC traffic through use of a modified baseline and consideration of cumulative effects.</p>	
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			<p>(iii) ESC has taken into account the potential for in-combination impacts with other projects, specifically the East Anglia One North and East Anglia Two windfarm developments and secured similar mitigation of HGV emissions from this development.</p> <p>(iv) The relevant air quality standard is for annual mean concentrations, and short-term impacts such as congestion would not be expected to significantly affect this conclusion. In the longer term, ESC understands that the proposed development is not forecast to result in a significant increase in congestion on the A12 that could affect the AQMAs. Air quality monitoring in the AQMAs will continue and can be used to trigger the need for additional mitigation to be agreed with the Applicant, if this is required.</p> <p>(v) Mitigation will be secured through an appropriate</p>	<p>iv) In response to the Relevant Representations and the engagement, SZC Co. has committed to construction HGV vehicles meeting Euro VI emissions performance standards, as confirmed in the CoCP (Doc Ref. 8.11(B)). SZC Co. has shared an Air Quality Mitigation Plan with the Councils which sets out how the improved commitments could be implemented, as recorded within the Statement of Common Ground (Doc Ref. 9.10.12).</p>	
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			management plan, under development between the Applicant and ESC.		
AQ.1.48	The Applicant	<p>Air quality monitoring</p> <p>(i) Please confirm the commitment to undertake air quality monitoring and the timing of when this would commence for the main development site and all the associated development sites both prior to, and during construction and subsequent operation.</p> <p>(ii) In light of the concerns raised by ESC over NO₂ levels in Stratford St Andrew AQMA, please advise how you would propose to monitor the air quality levels in</p>	n/a	<p>(i) Ongoing discussions are being held with ESC regarding an agreed management and monitoring approach. It is agreed between the Applicant and ESC that NO₂ monitoring undertaken by the Council will continue to be supported financially by SZC Co., including the monitoring of compliance within the Stratford St Andrew AQMA but also at other locations.</p> <p>(ii) See above.</p>	<p>ESC Consider the Applicant's response is generally reasonable.</p> <p>The Applicant notes that <i>"It is agreed between the Applicant and ESC that NO₂ monitoring undertaken by the Council will continue to be supported financially by SZC Co."</i> ESC may wish to discuss further with the Applicant to confirm the level of support envisaged.</p>

		this area and elsewhere to ensure standards were maintained and no breaches of standards occurred.			
AQ.1.49	The Applicant	<p>NRMM ESC have requested the adoption of low emitting plant and an assessment both alone and in combination of impacts on both human health and ecology from NRMM and other sources.</p> <p>(i) Please advise whether there is a commitment to low emitting plant and if so how this would be delivered.</p> <p>(ii) Has an assessment now been undertaken of the potential effects of NRMM</p>	n/a	<p>(i) In response to the Relevant Representations and the engagement, SZC Co. has committed to construction plant meeting Stage IV emissions performance standards. SZC Co. has shared an Air Quality Mitigation Plan with the Councils which sets out how the improved commitments could be implemented, as recorded within the Statement of Common Ground (Doc Ref. 9.10.12).</p> <p>(ii) Further discussions have been held with the Councils to agree the assessment conclusions and mitigation measures to be required for NRMM, as set out in the Air Quality Mitigation Plan within the Statement of Common Ground (Doc Ref. 9.10.12).</p>	<p>ESC consider the Applicant's response is generally reasonable, and discussions are ongoing.</p> <p>The Applicant's responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – applicant should clarify what is meant here.</p>

		and other sources as requested by the Council?			
AQ.1.5 1	ESC, EA, Natural England	Haul Routes (i) The Applicant has indicated that haul routes would be hard surfaced 'where practicable' – do you consider this approach to be adequate to safeguard sensitive receptors? (ii) Are there specific locations you consider that a more robust approach should be required, or should a more robust approach be provided across the main development site and associated development sites?	i) Hard surfacing “where practicable” is not considered to be fully satisfactory. ESC considers that the approach should be to provide hard surfacing where appropriate, in consultation with ESC if necessary within the CoCP (LIR 19.26 [REP1-0045]). ii) In other locations, alternative forms of mitigation (e.g. limit on vehicle speeds) would be sufficient. Rather than identifying specific locations ESC has suggested a methodology for hard surfacing site selection (paragraph 19.26 of the LIR [REP1-045]).	The wording relating to surfacing of haul routes has been discussed between the Applicant and the Councils and proposed wording is included in the Air Quality Mitigation Plan, as recorded within the Statement of Common Ground (Doc Ref. 9.10.12).	The Applicant’s responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.

AQ.1.5 4	The Applicant	<p>Mitigation Please explain how the various elements of mitigation relate to each other, and how they are secured by the dDCO. In particular how the Outline Dust Management Plan (oDMP), Dust Management Plan (DMP) relates to the Construction Environmental Management Plans (CEMP) and the Code of Construction Practice (CoCP). Please also set out which document would have precedence in the event of a conflict.</p>	n/a	<p>The Dust Management Plan (DMP) is required to be submitted to the Applicant as part of the details submitted for the Code of Construction Practice. The DMP must be in accordance with the principles of the Outline DMP as amended by the agreed mitigation measures in the Air Quality Mitigation Plan being agreed between SZC Co. and the Councils. There should be no conflict between the various documents but for the avoidance of doubt the Outline DMP will take precedence on the dust control measures to be adopted.</p>	<p>The Applicant's response is incomplete and does not reflect ESC's understanding.</p> <ul style="list-style-type: none"> • Applicant's response does not mention CEMPs. • Applicant's response does not explain relationship between DMP, Outline DMP and CoCP. • Applicant's response does not refer to the structure of dust control plans. <p>ESC's understanding is that the CoCP sets the framework and principles for dust control, mitigation and assessment. The DMP provides specific guidance and details on dust control, mitigation and monitoring. Contractors develop their own CEMPs which must be in accordance with the CoCP and DMP. Accordingly, it would be logical for the CoCP and then the DMP to take precedence.</p>
AQ.1.6 9	ESC, SCC	<p>Mitigation The Outline Dust Management</p>	<p>The Outline Dust Management Plan is in the ES Annex 12A.1 [APP-</p>	<p>The Applicant notes that further discussions have been</p>	<p>The Applicant's responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the</p>

		<p>Plan [APP-213] would be an essential part of the mitigation required to control construction activities on site. Do you consider it sufficiently precise that it would be enforceable?</p>	<p>213. ESC expects that as an outline plan, further details would be provided as the construction programme is developed and refined, and contractors are appointed.</p> <p>The Outline DMP refers to actions being taken “where possible” or “where practicable.” ESC expects that such comments should always be interpreted in the light of the relevant dust management guidance produced by the Institute for Air Quality Management, with a presumption that the measures identified from this guidance should always be adopted and, where appropriate, enhanced in the light of the specific features of this proposed development (e.g. scale and coastal setting of construction activities; see response to AQ.1.12).</p> <p>ESC considers that the Outline DMP is not fully enforceable at present, as would be expected at this</p>	<p>held with the Councils to agree the mitigation measures to be required, as set out in the Air Quality Mitigation Plan (refer to the Statement of Common Ground (Doc Ref. 9.10.12)). The measures set out in Table 4.1 of the CoCP Part B (Doc Ref. 8.11(B)) have been informed by a dust risk assessment and development of an Outline Dust Management Plan provided in Appendix 12A of Volume 2 of the ES [APP-213]. The measures secured by Table 4.1 of the CoCP Part B (Doc Ref. 8.11(B)) will be implemented by the contractors and the relevant measures set out in detail within the Construction Environmental Management Plan prepared by the contractor for the relevant stage of works. These measures are then secured by Requirement 2 of the Draft DCO (Doc Ref.</p>	<p>SoCG – the Applicant is asked to clarify what is meant here.</p> <p>The Applicant suggests that the proposed dust controls in the DMP are “precise and enforceable”. ESC does not agree, and is seeking further amendments to ensure that appropriate controls are available.</p>
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			<p>stage. ESC will continue to discuss the Outline DMP with the Applicant and will seek to obtain firmer commitments to certain measures to render them fully enforceable. It is expected that with a requirement for the CEMP to be approved by ESC, the necessary specifics for enforceability can be introduced at this stage. Examples of DMP items for further clarification are provided below:</p> <ul style="list-style-type: none"> • G1.4, seeking confirmation of which activities would be halted during adverse weather conditions • G2.2, two construction activities are listed as “significant dust generating activities.” Confirmation is sought regarding the significance status for all construction activities. 	<p>3.1(C)). Together these controls are considered to set out precise and enforceable mitigation measures.</p>	
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			<ul style="list-style-type: none"> • G2.4, seeking confirmation of which plant is considered to have “significant dust raising potential” • G4.1, seeking further details of how surface stripping would be managed in the light of likely variations in wind direction • G5.2, seeking confirmation of when scabbling would be required, the extent of this activity, and any further controls to be applied • G7.1, to update in the light of more recent commitments made in relation to HGVs conforming to Euro VI emission standard • G7.4, seeking clarification of when vehicle idling could be considered 		
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			<p>necessary and unnecessary</p> <ul style="list-style-type: none">• G7.5, seeking confirmation of the permitting status of stationary generators, and the arrangements that would apply if the stationary generators were not found to require a permit• M5.3, seeking clarification of how operations would be managed in the light of daily weather conditions. Would this be based on measured or forecast conditions, and what steps would be taken if adverse conditions were identified?• M5.4, seeking clarification of how the results of monitoring would be used to inform dust controls. What action would be		
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			<p>taken in the event of an exceedance of a threshold, and what ongoing monitoring would be carried out to confirm that the problem had been addressed? Would site activities be halted pending agreement of steps to be taken? How would the appropriate authorities be involved in the process?</p>		
AQ.1.7 2	The Applicant, ESC, SCC	<p>Code of Construction Practice The CoCP contains general phrases such as 'where possible' and 'will seek to ensure'. In such circumstances how would the local authorities be able to enforce compliance?</p>	<p>ESC considers it acceptable to have some conditional wording for controls on construction operations at this point, in view of uncertainties in the construction programme – these should become more developed as the Implementation Plan evolves. ESC considers that it is most important to establish principles for dust control at this stage, with the details to be completed in the light of these</p>	<p>The CoCP (Doc Ref. 8.11(B)) includes a range of targets and measures that would be defined and measured by contractors during the course of construction works. Detailed construction methodologies will be set out within the Construction and Environmental Management Plans that each contractor would prepare for a relevant stage of the</p>	<p>The Applicant suggests that the proposed dust controls in the DMP are “precise and enforceable”. ESC does not agree, and is seeking further amendments to ensure that appropriate controls are available.</p>

			<p>principles. ESC will continue to work with the Applicant to refine and improve the CoCP and associated documents.</p> <p>For some key sources of pollution such as HGV traffic, ESC is in discussion with the Applicant to eliminate caveats such as “where possible.” The use of ambiguous phrasing is not helpful and can lead to problems with enforceability.</p>	<p>construction stage. These would be reviewed and agreed with SZC Co. The absolute dust emission rate for any given task can not be known with complete certainty prior to the task starting and this is why best practice is based on a risk based approach that is able to respond to changing conditions, to maintain control of emissions of dust on each task and across the site as a whole. Monitoring and reporting measures will be used to demonstrate that contractors applying measures ‘<i>where possible</i>’ and ‘<i>seeking to ensure</i>’ they control emissions as required, are effective in doing so. Monitoring and enforcement from East Suffolk Council would be secured through the monitoring and reporting measures agreed in the CoCP (Doc Ref. 8.11(B)) and through the Environment Review Group secured by the Draft Deed of Obligation (Doc Ref.</p>	
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				8.17(C)). This approach represents best practice in securing the type of measures set out within the CoCP.	
AQ.1.7 6	The Applicant, ESC (part ii), SCC (part ii)	Mitigation The revised Mitigation Route Map [AS 276] has added for the Main Development Site “Use of contractor vehicles as far as practicable that meet the Euro VI emissions standards and Euro V standards (98/69/EC) as a minimum, unless otherwise agreed with the local authority. • Use of non-road mobile machines as far as practicable and available that meet the Stage IV engine standards	(ii) No, ESC do not consider this to be robust and have suggested amendments to the wording of HGV and NRMM engine standards within paragraphs 19.30 and 19.31 of the LIR [REP1-045], respectively.	The intent is the same for the Main Development Site and Associated Developments. The Mitigation Route Map (Doc Ref. 8.12(B)) submitted for Deadline 2 has been updated accordingly. A draft air quality mitigation plan is currently under discussion with the Councils. The draft mitigation plan has been updated in response to comments received from the Councils and to specify the commitments made to the use of Euro VI and Stage IV emissions performance, with only a percentage of vehicles/ plant to be exempt from meeting those standards (refer to Statement of Common Ground (Doc Ref. 9.10.12)).	The Applicant’s responses refer to an Air Quality Mitigation Plan detailed in the draft Statement of Common Ground. No such plan is mentioned in the SoCG – the Applicant is asked to clarify what is meant here.

		of the NRMM Emission Standards Directive to minimise NOx and particulate emissions on site.” (i) This wording is not consistent across the main development site and other associated sites – is there a reason for this? (ii) Do the Councils consider that as reworded this is sufficiently robust?			
AQ.1.78	The Applicant, ESC, SCC	CoCP Table 4.2 refers to regular inspection and monitoring and this terminology is used in several places. Regular could ostensibly be once a year, While it is assumed this is	ESC understands that Table 4.2 acts as a framework for contractors to base their CEMPs upon [AS-273] . It will be the CEMPs that should contain more detail on the monitoring frequency. Currently there is no commitment within the CoCP for CEMPs to be approved by the local authority. As per previous	The approach to inspection monitoring will be secured through compliance with the CoCP (Doc Ref. 8.11(B)), as required by Requirement 2 of the draft DCO (Doc Ref. 3.1(C)). The detailed Dust Management Plan will specify the frequency of inspections – for some	The Applicant suggests that the proposed dust controls in the DMP are “precise and enforceable”. ESC does not agree, and is seeking further amendments to ensure that appropriate controls are available.

		not the intention is there a more precise term that could be used to ensure maintenance and monitoring is undertaken expeditiously?	responses such as AQ.1.40, CoCP wording should be amended to require approval of the CEMP by ESC. This will provide a check on more detailed dust monitoring plans in the CEMP. ESC note the ExA's concerns and will work with the Applicant to develop an improved level of detail within the CoCP, DMP and CEMPs. For example, see response to AQ.1.72.	parameters this may be daily when works are being undertaken. Monitoring during construction will also be included in the Dust Management Plan. Dust monitoring results will be reported to the Councils monthly throughout the monitoring period and reviewed through the Environment Review Group (ERG), to which the Councils will be a participant.	
AI.1 Alternatives NO QUESTIONS FOR THE COUNCIL					
AR.1 Amenity and Recreation					
AR.1.0	The Applicant, ESC, SCC	Alde Valley Academy Leiston The off-site sports facilities are regarded as an important mitigation in assisting the assimilation of the workforce into the area. As currently set out the facility would not appear to	(I) ESC's expectation is that the off-site sports facilities will need to be open in advance of or at the same time as the accommodation campus. However, construction of the off-site sports facilities will need to be timed so as to not adversely impact on sensitive time periods at Alde Valley School e.g., examination time. Latest progress on the S106 is	(i) The latest position on the off-site sports facilities is set out in Schedule 10 of the Draft Deed of Obligation (Doc Ref. 8.17(C)). It is intended that these would open around the same time as the accommodation campus but the wording is intended to provide some flexibility in order to balance the benefits of opening the facilities with the	Timing of delivery of these facilities will need to be discussed further with the Applicant. ESC consider they should be in place before the Campus is operational, this is achievable provided the funding is in place at the appropriate time to enable ESC to deliver the off-site sports facilities without adversely impacting on sensitive time periods at Alde Valley School.

		<p>have a time frame for delivery, or in light of the ESC [RR-0342] resolved potential drainage concerns: (i) Please advise on the latest position in respect of the progress of the S106, surface water management issue identified, and what the timeframe for delivery of this facility would be. (ii) In order to achieve the necessary mitigation what timeframe for delivery would be required?</p>	<p>included in Schedule 10 [REP1-007] and we are progressing discussions further with the Applicant with regard to this element and ESC's role in design and build of the off-site facilities. Surface water drainage concerns will need to be addressed in the detailed design of the facilities; ESC is hopeful that this can be achieved but need to ensure it is secured through appropriate signing off of detailed design drawings incorporating an appropriate surface water drainage scheme. This could be secured via existing proposals for surface water drainage or through an alternative mechanism. (ii) the delivery of the off-site sports facilities will complement offerings to the workers at the campus, as such ESC would be keen for there to be a cap on number of workers permitted on site prior to the campus being available and for the off-site sports facilities to be</p>	<p>need to plan construction works at a time that minimises disturbance for Alde Valley School. For example, we would not want the off-site sports facilities construction to disturb pupils during public exams, so it may be more appropriate for these to open slightly later than the campus rooms.</p> <p>The Main Development Site Flood Risk Assessment (Doc. Ref 5.2A) [AS-018] concludes that this site is at low risk from all sources of flooding. SZC Co. notes ESC's comments on surface water flooding and will design this facility to manage surface water in accordance with the Outline Drainage Strategy (Doc Ref. 6.3 2A (A)) and in particular such that off-site flood risk is not increased. The detailed design and drainage proposals will be subject to approval by East Suffolk Council in accordance with Requirement 5</p>	
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			operational prior to or at the same time as the campus opens.	(Project wide: Surface and foul water drainage) of the draft DCO (Doc Ref. 3.1(C)). (ii) While delivery is necessary mitigation secured by the Deed of Obligation and meaningful in addressing community concerns, it is not necessarily linked to specific milestones of the Project, though would (as set out in Question AR.1.0), SZC Co. intends to link the opening of the off-site sports facilities to the delivery of the accommodation campus, subject to the caveats about disturbance to the school in (i) above.	
AR.1.1	The Applicant, ESC, SCC, Leiston and Sizewell PC.	Alde Valley Academy Leiston (i) In the event that the sports pitches and supporting facilities are not in place in a timely manner would the effect on the local community be regarded as	(i) The effect on the local community is likely to be significant as there are limited facilities in Leiston currently. (ii) ESC considers that the off-site sports facilities should be available prior to or at the same time as the campus opening. ESC would be reluctant for the campus to be made available prior to off-site sports provision.	(i) and (ii) Volume 2, Appendix 9E (Sport and Leisure Audit and Estimated Demand) of the ES [APP-196] sets out that the proposed facilities are not needed to mitigate for the potential effect on formal sports and leisure provision, but Volume 2, Chapter 9 [APP-195] notes that they would contribute towards community integration and cohesion in a	There is a disagreement between the Applicant and ESC as to the significance of effect on the local community if the off-site sports facilities are not provided in a timely manner. However, ESC is confident that they can be delivered in a timely manner and would welcome further discussion with the Applicant to ensure we both have the same aim and timetable for delivery.

		significant in your view? (ii) What time frame of delivery needs to be stipulated to avoid such effects?		<p>qualitative manner.</p> <p>SZC Co. considers that it would (as set out in Question AR.1.0) provide benefit in being linked to the delivery of the accommodation campus.</p> <p>Therefore, Schedule 6 of the Draft Deed of Obligation (Doc Ref. 8.17(C)) requires ESC in preparing a proposed timetable for the delivery of the sports facilities, to have regard to the planned occupation of the accommodation campus as set out in the Implementation Plan (Doc Ref. 8.4I(A)).</p>	
AR.1.3	The Applicant	<p>Mitigation</p> <p>In light of the comments from ESC in their [RR-0342] is it agreed a financial contribution to the Suffolk Coast RAMS is an appropriate way of mitigating for the recreational disturbance likely to arise from the accommodation</p>	n/a	<p>SZC Co. has agreed with ESC to provide the financial contribution to the Suffolk Coast RAMS set out in their relevant representation [RR-0342] (£149,912). The purpose of this funding is to mitigate for the recreational disturbance at European sites that could potentially be caused by construction workers residing at the accommodation campus and</p>	<p>Whilst ESC welcomes and agrees with the applicant's commitment to make a financial contribution to the Suffolk Coast Recreational Disturbance Avoidance and Mitigation Strategy (RAMS), by way of a small point of clarification in relation to their answer to ExA question AR.1.3, ESC would make the following comment: As set out in paragraphs 8.29 and 8.30 of the LIR [REP1-045], the purpose of Suffolk Coast RAMS is to address mitigation requirements arising from the in-combination impacts of new residential developments within the RAMS zone of influence. This contribution is considered to be required in addition to the direct mitigation measures the Applicant has identified to deliver (e.g. through the Minsmere Monitoring and Mitigation Plan –</p>

		<p>campus as suggested by ESC?</p>		<p>the Land East of Eastlands Industrial Estate (LEEIE) caravan site. SZC Co. consider that this is a robust and highly precautionary contribution because the calculations at paragraphs 1.67 and 1.68 of ESC's RR-0342:</p> <p>1. Do not allow for the fact that the Zone B tariff of £321.22 per dwelling used in ESC's calculation (from the Suffolk Coast Recreational Disturbance Avoidance and Mitigation Strategy (RAMS)⁶⁶) is based on there being more than one person residing in each dwelling on average. If the average residential occupancy was 2.4 people for example, this would equate to £133.84 per person and a lower RAMS contribution for accommodation campus and LEEIE based workers.</p> <p>2. ESC's RAMS calculation assumes full occupancy for a 10 year lifespan of the campus on</p>	<p>Walberswick European Sites and Sandlings (North) European Site). The Council considers that both mitigation 'strands' are required to address the 'alone' and 'in-combination' impacts on European designated sites considered likely to arise from this development.</p>
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				<p>a precautionary basis (see paragraph 1.67 of ESC's RR-0342).</p> <p>3. Construction workers at the accommodation campus and LEEIE have a different profile to typical residents and would use European sites for recreation substantially less than the general public for reasons summarised below.</p> <p>As described at the second bullet point in paragraph 3.3.10 of the Recreational Disturbance Evidence Base (Shadow HRA Report Volume 1 Appendix E Annex A [APP-148]), the workforce will be dominated by men aged 20-50, based on the national breakdown of people employed in the construction industry, and the key sport/recreation characteristics for this demographic group are as follows:</p> <ul style="list-style-type: none"> • preference and higher than national average participation in organised/formal sport - main reason is to meet friends; 	
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				<ul style="list-style-type: none"> • football and gym are overwhelmingly favoured as activities. The provision of formal recreation facilities for construction workers comprising a gym at the accommodation campus and sports facilities including a full-size 3G football pitch and two MUGAs at Alde Valley School adjacent to Leiston Leisure Centre is described in paragraphs 3.4.218 to 3.4.220 and 3.4.262 to 3.4.264 of Volume 2, Chapter 3 (Description of Construction) of the ES (Doc Ref. 6.14(A)); • work commitments are a significant reason for not undertaking recreation activity; and • other than sport, these groups are less likely to take part in recreation and leisure activities outside of the home. The majority of construction workers will work in shifts, limiting the time when all workers 	
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				<p>may be looking to undertake recreation activity (first bullet point in paragraph 3.3.10 of the Recreational Disturbance Evidence Base (Shadow HRA Report Volume 1 Appendix E Annex A [APP-148])). Indicative shift patterns are shown in section 1.3 of the Code of Construction Practice Part B(Doc Ref. 8.11(B)).</p> <p>A proportion of shifts will be during the day with <i>'time off'</i> during the hours of darkness when recreational resources at European sites are likely to be less attractive to construction workers because they are remote and unlit. Construction workers based in the accommodation campus and LEEIE would live alone because families would not be allowed to stay at the campus or at the LEEIE (first bullet point in paragraph 3.3.8 of the Recreational Disturbance Evidence Base (Shadow HRA Report Volume 1 Appendix E Annex A [APP-148])) describes this for campusbased</p>	
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				<p>workers; families would also not be allowed to stay at the LEEIE caravan site). The majority of these construction workers are likely to return home at weekends/at the end of their working period (paragraphs 3.3.8 and 3.4.20 and of the Recreational Disturbance Evidence Base (Shadow HRA Report Volume 1 Appendix E Annex A [APP-148])). It is during these periods that construction workers would be more likely to go for walks or cycle, when they will not be in the Sizewell C area and will not visit the European sites that could be affected during the construction of Sizewell C. Another reason why the agreed RAMS payment is considered robust and highly precautionary is because it is based on residents at typical dwellings, some of which would have dogs. Dogs are a key source of potential disturbance</p>	
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				<p>to wildlife at European sites, and also exercising dogs is a key reason to go for regular walks. Construction workers based at the accommodation campus (paragraph 3.3.18 of the Recreational Disturbance Evidence Base (Shadow HRA Report Volume 1 Appendix E Annex A [APP-148])) and LEEIE would not be allowed dogs at their accommodation. Therefore, dogs would not be a potential source of harm from this source, and these workers would not be undertaking regular (e.g. daily) dog walks. East Suffolk RAMS payments in East Suffolk are intended to provide funding to mitigate for all potential harm due to recreational disturbance at European sites. For the Sizewell C Project, in addition to the RAMS payment SZC Co. is proposing a suite of other mitigation measures for construction workers and for people who may be</p>	
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				<p>displaced from the area around the construction site to European sites including:</p> <ul style="list-style-type: none"> • A new informal car park accessed off the B1122, a surfaced footpath, and approximately 27 hectares of new open access land, including areas where dogs will be allowed to be exercised offlead at Aldhurst Farm (paragraphs 1.2.26 and 1.2.38 of the updated Rights of Way and Access Strategy in Volume 2, Appendix 15I of the ES submitted at Deadline 2 (Doc Ref. 6.3 15I(A)). This car park would be increased to 20 spaces early in the construction phase to allow for additional users of the recreational access network, and funding provision for this is to be included in the Deed of Obligation. • Improvements to Kenton Hills car park including additional spaces, management of 	
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				<p>vegetation and signage (paragraphs 1.2.24 and 1.2.39 of the updated Rights of Way and Access Strategy in Volume 2, Appendix 15I of the ES submitted at Deadline 2 (Doc Ref. 6.3 15I(A)) . This would provide up to 15 additional parking spaces allowing for greater use of the recreational access network including the permissive footpath network in Kenton Hills.</p> <ul style="list-style-type: none"> • SZC Co. is in discussion with SCC and ESC on projects which would enhance the right of way and access network, that lie outside the DCO site boundary, which will be funded by SZC Co. through the Deed of Obligation (a draft Deed of Obligation is provided in Doc Ref. 8.17(C)). These will include a number of enhancements outside European sites which will make recreational resources more attractive to use, helping to reduce displacement of people to European sites. 	
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				<p>Monitoring and Mitigation Plans for European sites are being developed by SZC Co. in consultation with Natural England, the RSPB and the National Trust, setting out how mitigation measures will be implemented where necessary, to ensure that recreational disturbance due to additional visitors arising from Sizewell C does not cause Adverse Effects on the Integrity (AEoI) of European sites. Two draft Monitoring and Mitigation Plans will be submitted into examination at an appropriate deadline and provide further detail. The first is submitted at deadline 2 (see the draft Minsmere Monitoring and Mitigation Plan – Walberswick European Sites and Sandlings (North) European Site (Doc Ref. 9.15)). These plans and the RAMS payment RAMS are elements of a broad mitigation package which will ensure that Sizewell C does</p>	
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				not cause any AEol of European sites.	
BIO.1 Biodiversity and ecology, terrestrial and marine					
Part 1 Biodiversity and ecology (terrestrial & marine) - General					
BIO.1.30	The Applicant	The Applicant Many IPs have raised concern over the absence of design of the HCDF. Please will the Applicant either; (a) table the design, or (b) explain why it is acceptable to proceed on the basis of the descriptions provided in the Application, pointing exactly to the material on which the Applicant relies. If the Applicant chooses (b), please will it also supply plans, sections and	n/a	At the time of the DCO submission a more detailed design of the HCDF was not available. This is not unusual and does not prevent the assessment of either its role in flood protection or its potential impacts on the environment because the key parameters that define those assessments <i>are</i> known. The design of the HCDF has continued and been refined (for example Change 9 in Volume 1, Chapter 2 of the ES Addendum [AS-181]). A document providing the illustrative detailed design, including plans and drawings, has been submitted at Deadline 2 (Doc Ref. 9.13). An additional design principle has been added to the Design and Access Statement (Doc Ref. 8.1Ad2 (A)) to minimise its	The issue here is whether the HCDF and SCDF design, we have only included questions and answers in the table where we have a specific comment to make in response which is sufficiently well developed to allow the Coastal Geomorphological assessment to proceed with confidence that it could identify a Worst Case location plan and profile. ESC's view is that given the changes we have seen in plan position and profile since the DCO submission, the parameters given to the SZC Co. Coastal Geomorphology assessment team by the Engineering design team did not include a sufficient allowance for change risk and therefore has not assessed a realistic worst case scenario. Evidence of ongoing change is the new significant seaward advance at the southern end of the HCDF that may now be further seaward than the BLF promontory. This information was included in the recently released Design Report. The Design report is helpful but not complete. E.g. it does not include comprehensive structure profile information at the critical location of the BLF promontory nor the new southern step forward.

		elevations on an OS base of what could be constructed.		seaward extent and further controls will be secured at a future deadline.	ESC welcomes the final point regarding the addition of an 'additional design principle to minimise its seaward extent'. However, text in the Design Report makes it clear that no change is possible, so this pledge does not appear likely to result in any tangible benefit.
Part 2 Biodiversity and ecology (terrestrial) - Main Development Site		Please note. Owing to the length of [APP-171] and the multiple topics and effects it assessed, the ExA asked the Applicant in [PD-005] to identify each of the headings in a way which clarifies both the subject matter and how each section, sub-section, sub-sub-section and so on sits in relation to preceding sections. As the paragraphs already had a number system separate from the headings the ExA suggested a lettering system. The lettered headings version submitted by the Applicant is at [AS-033]. The full list of headings is at electronic pages 372-381 of [AS-033] (hard copy pages 366-375). References to lettered sections in the questions below on [APP-171] are to those sections.			
The next set of questions address construction effects on plants and habitats, paragraphs 14.7.22 – 14.7.223					
The next set of questions addresses operational effects on plants and habitats, paragraphs 14.7.224 – 14.7.269					
The next set of questions address mitigation and monitoring for plants and habitats, paragraphs 14.7.270 - 280					
The next set of questions address Tables 14.12 and 14.13 – summary of effects, construction and operation respectively					
The next set of questions addresses invertebrates, section 14.8.					

The next set of questions addresses fish, section 14.9. NONE					
The next set of questions addresses amphibians, section 14.10. NONE					
The next set of questions addresses reptiles, section 14.11.					
The next set of questions addresses ornithology, section 14.12.					
The next set of questions address bats on the Main Site, section 14.13 of [APP-224] NONE					
Part 3	Biodiversity and ecology (terrestrial) - Northern Park and Ride NONE				
Part 4	Biodiversity and ecology (terrestrial) – Southern Park and Ride NONE				
Part 5	Biodiversity and ecology (terrestrial) - Two Village Bypass				
BIO.1.147	The Applicant	[AS-184] Similarly, at section 5.2 b)i)c), paras 5.2.27 and following, additional floodplain mitigation is described. Bearing in mind the statement at para 5.2.29 that the original ES	As set out in paragraph 8.119 of the LIR [REP1-045], ESC welcomes that the impact of the loss of this habitat is now fully acknowledged in the ES. Flood plain grazing marsh is a UK Priority habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) and therefore impacts on it must be	The introduction of floodplain grassland mitigation was introduced to address a concern from ecological stakeholders that the landtake of floodplain grasslands was not being mitigated, irrespective of the conclusion in the original ES that there was no significant effect on floodplain grasslands. The determination of no	In our response to this question we incorrectly stated that an Outline Landscape and Ecological Management Plan (oLEMP) for the Two Village Bypass had not been submitted to the examination, we acknowledge that an oLEMP has been submitted as an Additional Submission document under examination reference AS-263. We also acknowledge the inclusion of Requirement 22A in the latest version of the draft DCO [REP2-014] submitted at Deadline 2 which secures initial delivery of the measures described within the oLEMP. However, our concern over the final adoption of the areas of landscaping along the route

		<p>stated that there was no significant effect on floodplain grasslands, and the tests for requirements in a DCO please will the Applicant indicate how the changes are incorporated and secured in the DCO.</p> <p>Please will Natural England, ESC and SCC explain the justification for their incorporation bearing in mind the same matters.</p>	<p>appropriately addressed following the mitigation hierarchy. However, we remain concerned that whilst the mitigation proposed could result in a qualitative improvement in the remaining flood plain grazing marsh habitat, there will still be a net loss of area of this habitat type. As set out in LIR paragraph 8.111, we are also concerned that whilst it is proposed to secure this qualitative improvement through a Landscape and Ecology Management Plan (LEMP), no such document has yet been submitted into the Examination and therefore interested parties are not able to comment on it in more detail.</p>	<p>significant effect was based on the fact that the grasslands subject to landtake are of very poor quality (in ecological terms), being of improved pasture of the 'MG7 community' of the National Vegetation Classification. The new floodplain grassland mitigation is secured via way of its inclusion in the two village bypass oLEMP [AS-263], which is secured by Requirement 22A of the Draft DCO (Doc Ref. 3.1(C)).</p>	<p>(as set out in our answer to the Examining Authority's First Written Questions ExQ1 question BIO.1.149 [REP2-176]) remains.</p>
Part 6 Biodiversity and ecology (terrestrial) - Sizewell Link Road					

Part 7 Biodiversity and ecology (terrestrial) - Yoxford Roundabout NONE		
Part 8 Biodiversity and ecology (terrestrial) - Freight Management Facility (“FMF”)		
Part 9 Biodiversity and ecology (terrestrial) - Rail NONE		
The following questions are all addressed to Natural England, and in some cases to other parties. They address all or more than one of the Main Site and Associated Sites		
Part 10 Biodiversity and ecology (marine) - General Please note. Owing to the length of [APP-317] and the multiple topics and effects it assessed, the ExA asked the Applicant in [PD-005] to identify each of the headings in a way which clarifies both the subject matter and how each section, sub-section, sub-sub-section and so on sits in relation to preceding sections. As the paragraphs already had a number system separate from the headings the ExA suggested a lettering system. The lettered headings version submitted by the Applicant is at [AS-035]. The full list of headings is at electronic pages 694-724 of [AS-035] (hard copy pages 679-709). References to lettered sections in the questions below on [APP-317] are to those sections. NONE		
Part 11 Biodiversity and ecology (marine) - Plankton NONE		

Part 12 Biodiversity and ecology (marine) - Benthic Ecology NONE					
Part 13 Biodiversity and ecology (marine) - Fish NONE					
Part 14 Biodiversity and ecology (marine) - Marine Mammals NONE					
Part 15 Biodiversity and ecology (marine) - Indirect Effects and Food Webs NONE					
Part 16 Biodiversity and ecology (marine) - Mitigation NONE					
Part 17 Biodiversity Net Gain – unless stated otherwise, references are to the Applicant’s Biodiversity Metric Calculations document [APP-266]					
HRA.1 Habitats Regulations Assessment NO COUNCIL QUESTIONS					
HRA.1. 8	The Applicant	The Shadow HRA Report: Compensatory Measures [APP- 152] contains limited information on the specifics of the proposed habitat management measures at	ESC is eager to ensure that the compensatory measures set out in the Shadow HRA Report: Compensatory Measures, and in any other documents, are appropriately secured through the provisions of the draft DCO. As such, ESC would welcome confirmation from the	Proposed future management measures will be set out in an EDF estate-wide management plan, which will explain the long-term management of the marsh harrier compensation habitat area. ES, Volume 2, Chapter 14 (Terrestrial Ecology and Ornithology), Appendix 14C5:	ESC maintains its previous position: please could the Applicant confirm and demonstrate that the compensatory measures set out in the Shadow HRA Report are secured through the draft DCO.

		<p>Section 3.4 (c). There are also limited cross-references to other submission documents that may be being relied upon for the HRA compensatory measure package. Could the Applicant confirm where any further detailed information on the proposed management measures for the delivery of HRA compensatory measures are to be found in the application documents and/or additional submissions.</p> <p>The ExA notes ES Chapter 14 Terrestrial</p>	<p>Applicant that such provisions are secured in the draft DCO, alongside an explanation of the mechanism by which they are secured. This is not currently clear to ESC.</p>	<p>Marsh Harrier Mitigation Area Feasibility Report [APP-259] is updated by (Doc Ref. 9.16), which includes the proposed wetland habitats. Appendix B to Doc Ref. 9.16 includes an updated figure to show the proposed compensatory measures area, including the proposed wetland habitats, and the relationship of the area to the Order Limits. The revised proposals, which now include transforming 10% of the compensation area to wetland, represent a positive enhancement of the previously proposed design reported in the Marsh Harrier Mitigation Area Feasibility Report [APP-259] given the high suitability of wetland habitats for foraging marsh harriers. Therefore, the wetland creation will augment the previously proposed management that was focussed solely on enhancing</p>	
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		<p>Ecology and Ornithology Appendix 14C5 Marsh Harrier Mitigation Area Feasibility Report [APP-259]; however, this report dates from April 2019 and does not include information relating to the change to the water resource storage area and the subsequent inclusion of wetland habitats as part of the HRA compensation proposals for marsh harrier. Could the Applicant confirm where information on the proposed management measures,</p>		<p>prey abundance and availability on 'dry' habitat. The high suitability of wetland habitats for foraging marsh harriers is a point recognised throughout the discussions on the design of the compensation area and acknowledged by Natural England in its relevant representation; Part II, item 27.</p>	
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		<p>including the proposed wetland habitats, is to be found or provide this information.</p> <p>Furthermore, Appendix A (figure) to [APP-152] has a note that states it is to be revised in final design to include the enhanced compensatory habitat comprising wet woodland area and temporary water storage area. Could the Applicant provide an updated figure to show the proposed compensatory measures area, including the proposed wetland habitats,</p>			
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		<p>and the relationship of the area to the Order Limits. It would appear to the ExA that part of the land shown on the figure in Appendix A of [APP-152] lies outside of the order limits as shown on Sheet 1 of the Works Plans [AS-285].</p> <p>The broad category of 'marsh harrier habitat' in the mitigation route map addendum [AS276] refers to securing mechanisms of the Section 106 (Implementation Plan), Requirement 14 (MDS: Landscape works), and DCO Article 3 (Scheme</p>			
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		design). Could the Applicant confirm which of these mechanisms (if any) relate to the HRA compensatory measures proposals.			
CC.1 Climate change and resilience NO COUNCIL QUESTIONS					
CG.1 Coastal Geomorphology					
CG.1.2 1	The Applicant	Impacts on coastal processes Suffolk Coast Acting for Resilience [RR-1171] raise the issue of coastal erosion outside the narrow Sizewell Bay and the assumption that nothing will change south of the Great Sizewell Bay. Please respond specifically to the concerns raised in respect of: (i) the availability of long-term	n/a	(i) Monitoring and mitigation is not required for Aldeburgh to Shingle Street because the evidence shows there is no pathway to impact at these locations (see responses to CG.1.14 (i) and CG.1.16). Coastal erosion beyond Sizewell Bay is a regional scale process driven by large-scale geophysical, hydrodynamic and climatic forcing. The processes affected by Sizewell C are shown to be small scale and local as detailed in responses to CG.1.14 and CG.1.16 . Therefore, funding is not required for the works suggested. However, in the broader sense, the cost of complying with the Coastal	ESC has a similar concern to SCAR i.e the Potential Impact and Baseline Monitoring zone should be increased to the south. However, we agree with the Applicant that there are currently no grounds to extend Monitoring and Mitigation to Aldeburgh. However, ESC do consider the monitoring zone to be insufficient and are discussing with the Applicant the possibility of a 'Precautionary' position to be taken until results confirm that there is no impact at Thorpeness.

		<p>funds for coastal defence works, including for Aldeburgh to at least Shingle Street.</p> <p>(ii) Whether the latest information on climate change, sea level rise and coastal evolution has been taken into account and, if not, why not and how that affects the soundness of any assessments.</p>		<p>Processes MMP [AS-237] will depend on the results of monitoring. SZC Co. is committed through the DCO and DML to implement the measures identified in in the CPMMP and has included that in the evolving project cost estimate. The MMP will remain in force throughout the construction and operation of Sizewell C.</p> <p>(ii) The latest climate change estimates for coastal change have been used in assessments (UKCP18; APP-312, Section 2.4). Predictions for climate-related storm, wind, and wave changes applied in APP-312 are up to date and based on UKCP18. Work regarding the associated uncertainty is addressed in the response to CG.1.19 (i). The future shoreline assessment described in CG.1.19 (i) considered the possible timescales for accelerated change because, for example, the response of the shoreline to sea level rise is not a direct and predictable retreat¹³. Variation in rates of climate</p>	
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				change result in changes to the timing, but not the nature, of required HCDF mitigation. The underlying processes of coastal change requiring mitigation (to maintain a sediment transport pathway across the Sizewell C frontage) also remain the same, and are addressed in the Coastal Processes MMP [AS-237].	
CA.1. Compulsory acquisition NO COUNCIL QUESTIONS					
CA.1.3	The Applicant	<p>The scope and purpose of the Compulsory Acquisition Powers sought</p> <p>The SoR [APP-062], paragraph 5.5.8, states that Article 25 would authorise SZC Co. to enter onto any land within the Order Limits or which may be affected by the authorised</p>	ESC considers that a notice period of 28 days is more appropriate and would urge the Applicant to make this change.	<p>Article 25 authorises the Undertaker to enter onto any land within the Order limits or which may be affected by the authorised development to undertake various survey and investigative works. Except in cases of emergency, the Undertaker must give no less than 14 days' notice of its intention to exercise its powers under this article.</p> <p>The 14-day period is intended to strike an appropriate balance between giving the owner/occupier a reasonable degree of advance notice of</p>	ESC maintains its previous position that 28 days is a more appropriate timeframe.

		<p>development (whether or not that land is within the Order Limits) to undertake various survey and investigative works, including trial holes. Article 25(2) provides for a 14 day notice period to be given to the owner/occupier of the land. Please provide justification for a 14 day notice period and consider whether this is unreasonably short and should be extended to 28 days?</p>		<p>entry on the one hand, and the need to ensure that necessary surveys and investigations are carried out as soon as reasonably practicable on the other. That latter consideration is not simply a matter of avoiding unnecessary delay to the works overall, importantly it also affects the speed with which steps are taken to address the impacts that arise from the authorised development, insofar as these are ascertained using the Article 25 powers. The avoidance of undue delay in both respects is a significant public interest consideration, helping to ensure prompt action is taken where possible to address adverse environmental effects as and when they occur. There is a parallel with the equivalent notice period under Article 24 (Protective works to</p>	
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				<p>buildings). Article 24(3) provides the Undertaker with a right to enter and survey a building for the purpose of determining how the functions under Article 24 are to be exercised. Before exercising that right, Article 24(5) requires the Undertaker to give not less than 14 days' notice (save in an emergency). The 14-day notice periods in each case are the same as those provided for in the Southampton to London Pipeline DCO27 (Articles 19 and 20), the Riverside Energy Park DCO28 (Articles 19 and 20), the Silvertown Tunnel DCO29 (Articles 15 and 16), the Thames Tideway Tunnel DCO30 and the Wylfa dDCO31 as amended by the ExA (Articles 23 and 24). SZC Co. is not aware of any relevant circumstances that would justify a longer notice period in this case, or would mean that the notice period</p>	
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				considered appropriate in those other cases ought to be regarded as unreasonably short here. Nor is SZC Co. aware of any particular circumstances in this case that would justify doubling the notice period to 28 days.	
CI.1 Community Issues					
CI.1.0	The Applicant ESC	<p>Accommodation Strategy Within the Accommodation Strategy [APP 613] para 5.4.10 – reference is made to the layout being shared with ESC.</p> <p>(i) Please provide a copy of the layout and indicate the facilities that are to be included.</p> <p>(ii) Please provide an update of the latest position on the delivery, operation and</p>	The Applicant will provide a response to (i) and (ii).	<p>Response to (i)</p> <p>A copy of the LEEIE caravan park layout is provided in Figure 2.9 of the written responses.</p> <p>Each pitch will be provided with electricity and the site will provide separate toilet and shower facilities. Spacing of pitches and the ratio of toilets / showers required are in line with ESC advised standards. A foul treatment plant is proposed to address concerns about local capacity raised during consultation.</p> <p>The amenity building is expected to include laundry</p>	ESC is keen to promote opening of the LEEIE caravan park as early in the construction programme as practicable.

		<p>management of the site and how these components would be secured through the DCO</p>		<p>facilities and a vending machine for snacks. No bar or restaurant is proposed as lessons learnt from external caravan site owners at Hinkley Point C indicate that workers bringing caravans do not tend to use onsite bars and restaurants. In addition, the facilities of Leiston are close by and workers' use of these will deliver local economic benefits. The site will include 24/7 security and a vehicle inspection cabin would be provided to support this.</p> <p>(ii) In terms of securing mechanisms, for the LEEIE caravan park, Work No. 1A(ee) has been added to the latest draft Development Consent Order (DCO) (Doc Ref. 3.1(C)) which reads: '<i>serviced pitches for up to 400 caravans and 400 temporary car parking spaces</i>'. The delivery of the caravan park and timings are</p>	
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				<p>set out in the Draft Deed of Obligation (Doc Ref. 8.17(C)), with reference to the implementation plan. This reads: <i>'3.2.1 Unless otherwise agreed with the Accommodation Working Group, SZC Co shall use reasonable endeavours to deliver the LEEIE Caravan Park in accordance with the Implementation Plan'</i>.</p> <p>The Implementation Plan (Doc Ref. 8.41(A)) indicates that the LEEIE caravan park is planned to open at the end of year 1 of construction. It is proposed that the caravan park be operated and managed by an experienced accommodation operator and since submission of the Application for development consent, SZC Co. has been meeting with a number of local site operators to gauge interest in this opportunity. In terms of operation, the LEEIE caravan park will be</p>	
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				<p>open to Sizewell C workers only with no families or pets (including dogs) permitted. A 24/7 security presence will be maintained to manage entry to the site, keep residents safe and ensure that high standards of worker behaviour are maintained, in line with the Worker Code of Conduct that all Sizewell C workers will be required to sign (see section 4.5 Part A and section 1.2 Part B Code of Construction Practice (Doc Ref. 8.11(B)) and appendix to the Community Safety Management Plan for HPC example [APP-636]). Workers will be able to access the site 24/7 to accommodate all shift patterns and direct bussing will be provided to the main development site from the park and ride site at LEEIE. This will be secured through the Construction Worker Travel Plan (Doc Ref. 8.8(A)) (see response to CI.1.1 below).</p>	
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CU.1 Cumulative impact					
DCO.1 Draft Development Consent Order (DCO)					
DCO.1.0	The Applicant	Art 2. Definition of “commence” and the exclusions from it. The EM para 3.6. states that “the Environmental Statement does not indicate that these works would be likely to have significant environmental effects”. Could this be expressed positively as “The ES indicates that these works are not likely to have significant effects”? Is there a statement in the ES that the excluded works are not likely to have significant effects.	ESC is concerned that the definition of “commence” and pre-commencement activities is quite wide and that such activities excluded from the definition of commence may in fact have significant environmental effects and yet can be carried out without mitigation in place. It therefore proposes the following amendments to the draft DCO [AS-143] : <u>Amendment to the requirements:</u> Definition of “pre-commencement activities” to be inserted: “Pre-commencement activities” means any and all of those activities excluded from the definition of “commence”. New requirement to be inserted:	The activities excluded from the definition of the commencement of construction as defined within the Explanatory Memorandum (EM) (Doc Ref. 3.2(B)) para. 3.6. are referenced within the Description of Development Chapters of the ES Volume 2, Chapter 3 (Doc Ref. 6.14(A)) and Chapter 2 of each of Volumes 3-9 [AS-240] (NPR), [AS-242] (SPR) [AS-248] (SLR), [AS-256] (Rail), [PDB-003] (TVBP) and [APP-480] (OHI) and assessed as part of the construction phase as a whole within the relevant technical environmental assessment chapters. Where significant effects have been identified within the ES, these are in relation to specific activities or the peak construction period. No significant effects have been identified within the ES that relate to the activities	Whilst ESC welcome the amendments that the Applicant has made to the definition of ‘commence’ in revision 4 of the draft DCO, it still has some outstanding concerns. In particular, ESC remains concerned that items (a), (b), (d), (e), (f), (g), (h) and (j) which are excluded from the definition of ‘commence’ may have significant environmental, specifically ecological, effects. In addition, the Applicant appears to indicate in their response to this question that the removal of vegetation will have a significant effect. ESC therefore queries whether mitigation for this ought to be in place for this before this work is carried out.

			<p>"Pre-commencement activities</p> <p>(1) No part of the pre-commencement activities may take place until environmental surveying for those activities has been completed to the satisfaction of the local planning authority.</p> <p>(2) Should the local planning authority deem it necessary for subsequent monitoring to be carried out in relation to any pre-commencement activity, no such activities are to be carried out until details of such monitoring has been agreed.</p> <p>(3) Pre-commencement activities must be carried out in accordance with any monitoring requirements of the local planning authority."</p>	<p>excluded from the definition of the commencement of construction as defined within the EM para. 3.6.</p> <p>This is with the following exceptions:</p> <p>1) The removal of vegetation and site clearance works at the main development site would result in significant residual effects on ecological receptors due to habitat loss. The habitats would be reinstated through the landscape scale restoration of the EDF Energy estate at the end of the construction period, which would overall deliver biodiversity net gain and as such would provide a long-term significant beneficial effect during the operational phase. However, the effects during construction are significant adverse.</p> <p>2) A residual significant adverse effect on the historic landscape character at the main</p>	
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				<p>development site has also been identified due to the removal of potentially important historic hedgerows. It is proposed that the historic landscape features would be recorded in accordance with an agreed written scheme of investigation prior to the start of construction. The conclusion of <i>'no likely significant residual effects'</i> has also been reached on the basis that measures set out within the Code of Construction Practice (Doc Ref. 8.11(B)) and other pre-commencement conditions will be implemented, as appropriate. The text in para. 3.6 of the Explanatory Memorandum has been updated accordingly. The exclusion of the specified activities from the definition of <i>'commence'</i> remains appropriate for the reasons identified in para. 3.6 of the Explanatory Memorandum (Doc Ref.</p>	
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				3.2(B)). Note that the drafting in Revision 4 of the draft DCO (Doc Ref. 3.1(C)) now removes from the exclusions to the definition of ' <i>commence</i> ' the removal of hedgerows, and dewatering, following the ExA's comments. These elements of the project therefore would fall within the definition of ' <i>commence</i> '.	
DCO.1.1	The Applicant	Art 2. Definition of "commence" and the exclusions from it. Given that e.g. the Sizewell B Relocation Works will involve decontamination, is this exception from the definition of "commence" appropriate?	ESC does not consider it appropriate for this to be excluded from the definition of "commence".	To the extent remediation works are required in the land comprised in Work No. 1D or 1E, any such works of themselves would not be likely to have significant environmental effects provided the measures set out within the Code of Construction Practice (Doc. Ref. 8.11(B)) are implemented. For this reason, and the other reasons identified in para. 3.6 of the Explanatory Memorandum (Doc Ref. 3.2(B)), these works are appropriately	ESC would like the Applicant to confirm where in the ES the conclusion that such activities would not be likely to have significant environmental effects, can be found.

				included in the list of exceptions.	
DCO.1.2	The Applicant, ESC, SCC	<p>Art 2. Definition of “commence” and the exclusions from it.</p> <p>(i) Are the exclusions justified for all of the Proposed Development?</p> <p>(ii) Might it be appropriate to exclude later phases and to limit the exclusions to the earliest phases of the Proposed Development? In both (i) and (ii) please explain concisely why.</p>	<p>(i) and (ii)</p> <p>ESC is of the view that the exclusions from the definition of commence are unjustified and that they allow for various activities to take place that may have environmental effects, but without mitigation. In particular, ESC is concerned that site preparation and clearance works are being included – if these are outwith environmental surveys and monitoring then this could cause problems.</p> <p>ESC suggests that the following amendments are made to the requirements in order to deal with this concern:</p> <p><u>Amendments to the requirements:</u></p>	<p>(i) It is considered appropriate and justified that the exclusions (as updated in Revision 4 of the draft DCO (Doc Ref. 3.1(C)) to make an exception of important hedgerow and dewatering works on the main development site) apply to all of the authorised development. The site clearance and hedgerow removal works described in DCO.1.0 must be carried out in general accordance with the Code of Construction Practice (Doc. Ref. 8.11(B)), in accordance with the Terrestrial Ecological Monitoring and Mitigation Plan (TEMMP) [REP1-016] and the Main Development Site Clearance Plans [AS-120], as required by Requirements 2, 4 and 6 respectively. Requirements 2, 4 and 6 are not pre-commencement requirements and therefore the definition of ‘commence’ (and, in particular, the</p>	ESC directs the Examining Authority to its comments in relation to DCO.1.0.

			<p>Definition of “pre-commencement activities” to be inserted:</p> <p>“Pre-commencement activities” means any and all of those activities excluded from the definition of “commence”.</p> <p>New requirement to be inserted:</p> <p><u>Pre-commencement activities</u></p> <ol style="list-style-type: none"> 1. No part of the pre-commencement activities may take place until environmental surveying for those activities has been completed to the satisfaction of the local planning authority. 2. Should the local planning authority deem it necessary for subsequent monitoring to be carried out in 	<p><i>‘site preparation and clearance works’</i> exception) have no bearing on the applicability of these requirements.</p> <p>It should be noted that</p> <ul style="list-style-type: none"> • the Applicant has updated the drafting of Requirements 14A and 14B in revision 4 of the draft DCO (Doc. Ref 3.1(C)) to ensure that the <i>‘site preparation and clearance works’</i> exception could not be interpreted as having the effect of overriding the requirement to submit and obtain approval of a fen meadow plan and wet woodland plan before vegetation clearance is carried out within the Sizewell Marshes SSSI; and • the Applicant has added to the <i>‘site preparation and clearance works’</i> exception in revision 4 of the draft DCO (Doc. Ref 3.1(C)) a carve out for the removal of any important hedgerows within Work No. 1A to ensure that Requirement 3 must still 	
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			<p>relation to any pre-commencement activity, no such activities are to be carried out until details of such monitoring has been agreed.</p> <p>Pre-commencement activities must be carried out in accordance with any monitoring requirements of the local planning authority.</p>	<p>be complied with in respect of such activities to ensure that site specific WSIs are submitted to and approved by SCC in relation to their removal.</p> <p>(ii) For the reasons given in response to questions DCO 1.0, DCO 1.1 and part (i) above, it is considered that the exceptions to the definition of ‘commence’ (as amended) are appropriate and justifiable, and that there are no gaps in mitigation (as secured by Requirement) created as a result. As such, the Applicant considers that it is not necessary to limit any or all of the exclusions to earlier phases of the development.</p>	
DCO.1.7	The Applicant, ESC, SCC	<p>Art 2 – definition of “maintain” and Art 6 – power to maintain.</p> <p>The definition includes “alter, remove or reconstruct”. On its face, that would include</p>	<p>(i) ESC agrees with the ExA that the words ‘remove’ and ‘reconstruct’ ought to be removed from the definition of ‘maintain’.</p> <p>(ii) Although ESC is comfortable that this is not the Applicant’s intention, it agrees with the ExA that the</p>	See Appendix 14F - DCO Drafting Note 6.	<p>The Applicant’s draft DCO revision 4 includes an expanded definition of the term ‘maintain’, which now includes the words ‘replace and improve’. ESC does not consider the inclusion of these words appropriate as they could be construed as having the same or similar meaning as the word ‘reconstruct’.</p> <p>ESC invites the Applicant to explain the basis on which it has included these words.</p>

		<p>decommissioning and the construction of a new power station. The ExA doubts this is what is intended and notes that there is intended to be a limit by reference to new or materially different environmental effects. However, lesser reconstructions may pass that test but nonetheless be development which ought to be regulated by planning control?</p> <p>(i) Might the following definition be adequate: “maintain” includes inspect, repair, adjust, alter, clear, refurbish or</p>	<p>current definition is too wide and that, on the face of it, it could allow the Applicant to carry out decommissioning works and the construction of a new power station. The definition suggested by the ExA under point (i) is considered sufficient by ESC to address this concern.</p> <p>(iii) N/A – for the Applicant.</p> <p>(iv) ESC would expect the Applicant to approach it should there be an instance in which any works or any operation was different to how it had been planned within the DCO application documents. ESC would then expect to be consulted on whether something had any new or materially different environmental effects to those identified in the environmental information.</p>		
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		<p>improve, and any derivative of “maintain” is to be construed accordingly”, with the addition of the prohibition relating to maintenance causing environmental effects?</p> <p>(ii) If the Host Authorities consider that the current definition is too wide, would they please give examples of development it permits but which the Host Authority considers should be subject to planning control? Would they please also consider whether the ExA’s suggestion above would deal with</p>			
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		<p>their concern and give reasons? (iii) If the Applicant disagrees with the ExA's suggestion, please will it, in answering the question, explain clearly the intent of the breadth of the definition and reflect on whether it ought to be reduced? (iv) See also the ExA's questions on Sch 2 para 1 (tailpieces in the context of EIA). Taking that also into account, how does the Applicant expect that the prohibition relating to maintenance causing environmental effects would work in practice</p>			
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		<p>and be enforced? How would the local planning know in advance of an item of maintenance that materially new / different effects would be caused by the maintenance? What action would they be able to take? Or is the intention and practice simply going to be that maintenance which breaches the prohibition would be without approval, a breach of the DCO and therefore a criminal offence? Please will the Host Authorities also consider question (iv) and respond?</p>			
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DCO.1.21	The Applicant	<p>Art 4(1) – vertical limits of deviation.</p> <p>This permits unfettered vertical deviations, subject to the Requirements and provisions in Art 11 relating to streets. Art 4(2) limits vertical deviation to 1 metre for Work 4C (Saxmundham – Leiston branch line) and Works 11 and 12 (Two village bypass and the Sizewell Link Road).</p> <p>The ExA see that the Requirements contain some references to Parameter Plans. But to take requirement 11</p>	<p>ESC shares the ExA’s concerns in relation to the clarity over the seeming lack of limits of deviation [AS-143] and refers the ExA to its response to question G.1.0.</p>	<p>See Appendix 14I – DCO Drafting Note 9.</p>	<p>ESC directs the Examining Authority to its comments in relation to G.1.0.</p>
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		<p>as an example, it is not immediately clear that Work Nos. 1A (a) to (e) are subject to the Parameter Plans (though any variations from the Approved Plans and the design principles in Ch 5 of the Main Development Site Design and Access Statement must accord with the Main Development Site Operational Siting and Height Parameters and two of the three Main Development Site, Operational Parameter Plans). (to be found at SZC Book 2, 2.5, [APP-018]).</p>			
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		<p>Similarly, a somewhat close reading of the Requirements is necessary to see which Parameter Plans have been applied to which Work, whether they are applied to the right Works, to ascertain whether the whole of the Proposed Development is limited by the Parameters Plans and whether or not all the Parameters Plans have been applied.</p> <p>As the ExA reads the Requirements and the rest of the DCO there appears to be no general</p>			
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		<p>overriding rule that the development must not exceed the limits in the Parameter Plans. A clear straightforward limitation in the DCO preventing the Proposed Development from exceeding the Parameter Plans (which the ExA assumes describe the limits of what was assessed on normal Rochdale principles) would be helpful.</p> <p>(i) Please will the Applicant insert such a provision in the next draft of the DCO or alternatively explain why it would be inappropriate?</p>			
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		<p>se will the ant also provide a iliation of the eter Plans in the ith the project ed in the ES?</p> <p>Please will the Applicant specify and explain the power for Art 4 – it is not referred to in the EM?</p>			
DCO.1. 24	The host authorit ies	<p>Art 5(5). Will the Host Authorities indicate if they are content with Art 5(5) and the list of conditions and corresponding requirements deemed to be satisfied set out in Sch 8</p>	<p>Whilst ESC understands the Applicant’s approach in Schedule 8, it is concerned that certain conditions in Permissions 1 and 2 are not appropriately reflected in the Requirement which is drafted as corresponding to the conditions [APP-143]. ESC has the following particular concerns:</p> <p><u>Schedule 8, Part 1, row 3, and Part 2, row 3:</u> There appears to be no equivalent of conditions 7, 9,</p>		<p>ESC remains concerned that in Schedule 8, certain conditions in Permissions 1 and 2 are not appropriately reflected in the Requirement which is drafted as corresponding to the conditions (please see ESC’s response to DCO.1.24 for Deadline 2 for full details). In addition, ESC notes that in revision 4 of the draft DCO submitted for Deadline 2, the Applicant has inserted additional reference to requirements 2 and 5.</p> <p>ESC would like the Applicant to provide a full explanation as to the equivalence between the conditions and the requirements listed in the table in Schedule 8.</p>

			<p>10, 12, 13 or 17 in the CoCP (or other control documents or in the Requirements themselves). ESC would welcome an explanation from the Applicant as to how it considers that the provisions in these conditions are replicated in Requirement 2.</p> <p>In relation to conditions 7 and 10 in particular, ESC considers that this would be best addressed through a new separate requirement in Schedule 2 of the draft DCO.</p> <p>In addition, there also appears to be no equivalent of conditions 18 and 19 in relation to emergency plans. Although ESC notes that there is now a new Requirement 5A in draft DCO v.3.1, this requirement does not reflect the conditions.</p> <p><u>Schedule 8, Part 1, row 4, and Part 2, row 4:</u></p>		
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			<p>Requirement 14, or the OLEMP sitting under it, does not appear to specify any maintenance period whereas condition 12 refers explicitly to a 5 year maintenance period.</p> <p><u>Schedule 8, Part 1, row 5:</u> Condition 26 appears to be covered by Requirement 7 rather than Requirement 5.</p> <p><u>Schedule 8, Part 2, row 6:</u> Not all of condition 21 is covered by Requirement 3. In particular, the following isn't: "None of the buildings hereby approved shall be occupied until the site investigation and post investigation assessment has been completed, submitted to and approved in writing by the Local Planning Authority, in accordance with the programmes set out in the Written Scheme of Investigation approved under Condition [20] and the</p>		
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			provision made for analysis, publication and dissemination of results and archive deposition.”		
DCO.1.50	The Applicant, host authorities	<p>Art 79. This allows felling and other tree surgery to any tree or shrub “near any part of the [Proposed] Development”. How far is near? Could a maximum distance be added?</p>	<p>ESC is concerned that this Article [AS-143] is currently drafted to include a power that is far too wide and which is unjustified. ESC considers that it would be sufficient for the Applicant to have the power to fell trees etc. solely within the Order Limits. It therefore proposes that this Article be amended so that it reads:</p> <p>“The undertaker may fell or lop any tree or shrub within the Order limits, or cut back its roots or branches to the extent that they are within the Order limits, if it reasonably believes it to be necessary to do so...”</p>	<p>Article 79 only permits trees or shrubs to be felled or lopped where the Applicant reasonably believes that this is necessary to prevent that tree or shrub from obstructing or interfering with the authorised development or constituting a danger to those using the authorised development. It is in this context that the reference to the tree or shrub being ‘near’ should be interpreted. The greater the distance between the individual tree or shrub and the proposed development, the less reasonable any belief that the Applicant may have that works are required. The reasonable distance will vary depending on the part of the authorised development concerned and so the concept of nearness must be flexible.</p>	<p>ESC remains concerned that Article 79 is drafted too widely. Please see ESC’s response to DCO.1.50 submitted at Deadline 2 for full details.</p>

				<p>Moreover, given that felling or lopping may be required to avert danger, the Applicant considers that it would be inappropriate to define ‘near’ by reference to a maximum distance. Compensation is payable under Article 79(2) to any person who sustains any loss or damage arising from the Applicant's carrying out of such felling or lopping. Provisions equivalent to Article 79 of the draft DCO using the word ‘near’ can be found in The Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 as well as many other granted DCOs, including: The Cleve Hill Solar Park Order 2020; The Norfolk Vanguard Offshore Wind Farm Order 2020; The National Grid (Hinkley Point C Connection Project) Order 2016; The Thames Water Utilities Limited (Thames Tideway Tunnel) Order</p>	
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				2014; and The Hinkley Point C (Nuclear Generating Station) Order 2013.	
DCO.1.54	The Applicant, The Host Authorities, parties to which the deemed consent provisions in the Articles of the dDCO apply	Art 83 and Sch 23 – procedure for approvals, consents and appeals. (i) The ExA invites comments in general on Sch 23 from the Host Authorities who will be the recipients of most applications and appeals to which Sch 23 will apply. (ii) Parties to which the deemed consent provisions in the Articles of the dDCO apply are also invited to comment on Sch 23, and their attention is drawn to the EM para 9.25 and following. (iii) In para 1(2) of Sch 23, there are	(i) ESC has a number of comments to raise in relation to Schedule 23 [AS-143], as follows: 1(2)(b) is considered unnecessary as, as far as ESC is aware, there is never a situation in which a body does not have to consult further. If the Applicant considers that this is necessary, ESC would welcome an explanation of when such a situation would arise. 2(1): ESC considers it important that it is explicitly set out within this Schedule that it is not confined to being able to ask for further information just once and would invite the Applicant to make an appropriate change to 2(1) in response to this concern.	i) Not for the Applicant. ii) Not for the Applicant. iii) Para (1)(2)(b) has been updated to allow for six weeks as per the model schedule at Appendix 1 of Advice Note 15. iv) Council resources will be included in the next revision of the draft Deed of Obligation which will be submitted at Deadline 3 so it is not considered necessary to add fees-related drafting to the draft DCO. To confirm, in revision 3 of the draft DCO [AS-143] the reference to Circular 03/2009 was replaced with reference to the Planning Practice Guidance.	ESC welcomes the changes that the Applicant has made to Schedule 23 in revision 4 of the draft DCO submitted for Deadline 2, to bring the timescales in line with Advice Note 15. However, ESC maintains its previous position that reference to fees relating to staffing costs for the discharge of requirements ought to be made within Schedule 23. ESC would welcome the provision of some wording from the Applicant to address this issue.

		<p>two different time periods for discharge of requirements depending on whether consultation is necessary. The shorter period, 5 weeks, is shorter than the period specified in the model Sch at Appendix 1 of the Inspectorate's Advice Note 15. Whilst the ExA note the Applicant's more generous 8 week period in consultation cases, what is the justification for taking a week off the standard period?</p> <p>(iv) Fees. The ExA notes that there is no drafting at present and that the Applicant hopes to cover</p>	<p>2(2): 7 working days is considered too short a period, and shorter than the proposed period in Advice Note 15 which advises 10 business days. ESC considers that 10 working days would be more appropriate.</p> <p>2(3): 3 working days is considered too short a period, in particular as this does not even cover a full working week when the relevant person may be on leave or not working; ESC considers that 10 working days would be more appropriate.</p> <p>3(2)(d) and (e): 10 working days is considered too short a period, and shorter than the proposed period in Advice Note 15 which advises 20 business days. ESC considers that 20 working days would be more appropriate.</p>		
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		<p>these with a performance or s.106 agreement. Until such time as that is concluded satisfactorily, the ExA would prefer to see drafting on fees in the dDCO. Please will the Applicant insert in the next draft of the dDCO the wording to be found at Sch 2 Part 2 para 3 of the Northampton Gateway DCO as made, (2019/1358). The ExA is not, by requiring this, expressing any view as to the desirability or fairness of those provisions. Please will the Applicant explain why para 3(11) of Sch 23 which reads: "the appointed person</p>	<p>(ii) ESC has commented under (i) above.</p> <p>(iii) ESC has provided a comment on this under (i) above.</p> <p>(iv) ESC agrees that reference to fees ought to be made within Schedule 23 and considers that it would be appropriate for Schedule 23 to cross refer to the section 106 agreement to the extent that it relates to staffing costs for the discharge of requirements. ESC would welcome the Applicant providing some wording in this regard.</p>		
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		<p>must have regard to Communities and Local Government Circular 03/2009 or any circular or guidance which may from time to time replace it” refers to Circular 03/2009 rather than “the Planning Practice Guidance published by the Department for Communities and Local Government on 6th March 2014 or any circular or guidance which may from time to time replace it” which is the wording in Appendix 1 of AN15?</p>			
DCO.1.61	The Applicant, ESC, MMO,	<p>Sch 1 Part 1. Work No 2. The routes of the tunnels are not shown. Please</p>	<p>ESC agrees with the ExA that it is not clear if, or where, the routes of the tunnels are shown on the plans submitted as part of the</p>	<p>The boundary within which the cooling water and fish return tunnels (Work Nos 2A, 2C,</p>	<p>ESC’s previous concerns remain (for full details please see ESC’s response to DCO.1.61 submitted for Deadline 2).</p>

	<p>Natural England</p>	<p>will the Applicant explain why. Please also confirm that whether shown or not, they will not extend outside the Order Limits or the limits to the Works comprised in Work No. 2 shown on the Works Plans. Work numbers 2B and 2D shown on the works plans indicate the separation between the cooling water intakes for units 1 and 2. Can the Applicant explain the separation distances between them, which presumably accounts for tunnelling for unit 1 (work no. 2A)</p>	<p>application. Furthermore, ESC agrees that the limits of deviation for the bored tunnels appear to be unlimited within the harbour area and ESC is concerned with this approach [AS-143]. In particular, ESC's concern relates to the adequacy of environmental assessment carried out and reported in the ES. ESC would welcome the Applicant's explanation as to how the environmental impact assessment has been carried out and what assumptions about tunnel locations have been made in coming to conclusions on the likely significant effects of these works.</p>	<p>2E, 2G, 2I and 2K) may be carried out is shown on the Works Plans 2, 4, 5 and 6 by reference to the green dotted line shown in the key which refers to these works. The description of these works in Schedule 2 expressly cross-refers to these Works Plans. The Applicant confirms that these works will not extend outside the Order limits. This is clear on the plans, since the boundary of the green dotted line within which these works are to be carried out does not extend outside the solid red line on the Works Plans which indicates the Order limits. It was not considered necessary to show the exact alignment of the completed tunnel within these areas, since: (i) the alignment of the tunnels will be constrained in practice by the location of the outfalls for each tunnel, which are shown by</p>	<p>In addition, ESC notes that the Applicant's response to this question appears to be internally inconsistent in that it says that the MMO will have to confirm the locations for tunnels in the Deemed Marine Licence but then also states that a Deemed Marine Licence may not be necessary.</p>
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		<p>being 200m shorter than the corresponding water intake for unit 2 (work no. 2C)?</p> <p>Whilst the intake locations are set out on the works plans, the limits of deviation for the bored tunnels themselves are unlimited within the harbour area as shown on the works plans. This also applies to work no. 2E, 2G, 2I and 2K, which extend between work no 1A and terminate at work 2F, 2H, 2J and 2L respectively Can the Applicant confirm what assumptions have been made regarding their alignment within the ES and HRA, and why more</p>		<p>dotted black lines in the form of circles/ovals shown on the Works Plans and labelled as Work Nos, 2B, 2D, 2F, 2H, 2J and 2K, and the need for the tunnels to be built in straight lines from the power station onshore; and (ii) the deemed marine licence requires details of the tunnels to be approved by the MMO prior to commencement of these works. See DML condition 44 and 48 which refer to '<i>the alignment (horizontal and vertical)</i>' of these tunnels.</p> <p>Abstraction of cooling water is not only part of the conventional electricity generating process of a direct-cooled station, but it also serves to cool essential and safety systems.</p> <p>Therefore, the cooling water infrastructure is safety classified and needs a degree of redundancy built in, such that if cooling water from one</p>	
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		<p>defined limits of deviation cannot be set out on the works plans. ESC, MMO and Natural England may also wish to comment on this.</p>		<p>source is lost then cooling can still be maintained from another source. Relative geographic separation of the two intake tunnels achieves this redundancy (each intake tunnel also has two intake heads, separated by 100m for the same reason). The ExA is correct that the tunnel lengths simply reflect the shortest route to the intake heads. There is no significance attached to this.</p> <p>The alignment of the three cooling water tunnels is completely disregarded in the ES and HRA assessments as, being several tens of metres below the seabed there is no pathway for them to cause environmental impacts (concerns regarding bentonite frack-out from the Tunnel Boring Machines notwithstanding as that has no relevance to the route of the</p>	
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				tunnels). Indeed, it is likely that the tunnels themselves will be exempt from needing a Marine Licence for those same reasons.	
DCO.1.69	The Applicant, ESC	<p>Sch 1 Part 2, Other Associated Development.</p> <p>The Works in Sch 1 Part 2 may be carried out during both the construction period and the operational period which is some 60 years. They apply also to maintenance. Many of them are works which would normally require planning consent. For example para (b) would allow new drainage systems; (c) allows stacks and chimneys; (i) allows new amenity buildings; (i) also allows</p>	<p>(i) and (ii): ESC is of the view that the principle of including such works is justifiable, but this list does appear more extensive than usual and contrasts with the precision with which the numbered works are specified in words and shown on the works plans [AS-143]. Some of the works listed here are of an equivalent nature to the numbered works (e.g. (c) and (n)) and should be their own numbered work; and others would only apply to specific works rather than any of them (e.g. (g) and (l)) and should be included in the descriptions of those works only. ESC would further wish to be satisfied that:</p> <ul style="list-style-type: none"> - the Applicant has assessed the likely significant effects 	See Appendix 14B - DCO Drafting Note 2.	ESC's previous concerns remain (for full details please see ESC's response to DCO.1.69 submitted for Deadline 2).

		<p>“associated structures and plant; and (i) also allows associated post-operation phase work” without stating with what they are to be associated (the post-operation phase is presumably some 60-70 years hence and includes the decommissioning phase); (k) allows extensive alterations to highways; (n) includes habitat creation; (o) includes works for the protection of land or structures; and (p) allows “such other works as may be necessary or expedient” for construction, operation and</p>	<p>of these appropriately in the ES; and - that any works are limited to being within the Order Limits.</p> <p>ESC would welcome the Applicant’s confirmation on these points as well as clarification and/or confirmation on points (iii), (iv) and (v).</p>		
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		<p>maintenance (with a reference to environmental effects).</p> <p>(i) Is it justifiable to have such extensive powers in relation to the operation and maintenance of the Proposed Development?</p> <p>(ii) Is the location of the works limited to the Order Limits?</p> <p>(iii) What will be the constraints in the DCO if made on the development they permit?</p> <p>(iv) The EM para 10.4 says they are “minor works”. Where is such a limit set out in the dDCO?</p> <p>(v) Please will the Applicant supply a reconciliation of the works described in Sch 1</p>			
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		Pt 2 with the development assessed in the ES?			
DCO.1.78	The Applicant, ESC	<p>R4.</p> <p>(i) Please will the Applicant collate where the ES sets out the need and content of ecological monitoring which is referred to in this requirement? Please will it also explain how R4 complies with the need for EIA prior to decision in the light of R v. Cornwall CC ex p Hardy Env L R 25; [2001] JPL 786?</p> <p>(ii) Why is the terrestrial ecology monitoring plan confined to the works listed on R4? Should it not be required for all the Works?</p>	<p>(i) For the Applicant to respond on.</p> <p>(ii) ESC agrees with the ExA that a terrestrial ecology monitoring plan should cover all of the Works forming part of the authorised development as any of them may have impacts on terrestrial ecology, and, as the approving body under this requirement, ESC would expect this to be the case [AS-143].</p>	<p>Please see Appendix 14L – DCO Drafting Note 11.</p>	<p>ESC notes that this Requirement has been updated in revision 4 of the draft DCO submitted by the Applicant for Deadline 2.</p> <p>ESC confirms that it has seen and commented on a draft of the Terrestrial ecology monitoring and mitigation plan (TEMMP) at Deadline 2. The TEMMP is not yet agreed.</p> <p>Whilst ESC is not concerned with the approach set out in Requirement 4, it notes that the TEMMP is not listed as a certified document in the draft DCO and would suggest that it is included as a certified document in the next draft of the DCO so as to ensure compliance is with an identifiable document.</p>

DCO.1.87	The Applicant, ESC	<p>(i) It seems to the ExA that the implementation of the landscape and ecology works could be avoided simply by failing to submit the landscape scheme. Should not the prohibition on commencing the landscape works be changed to a prohibition on commencing the authorised development?</p> <p>(ii) Is this the Requirement referred to at para 7.1.2 of the oLEMP [APP-588]?</p>	<p>(i) ESC agrees with the ExA and considers that this is the case of a minor oversight from the Applicant.</p> <p>(ii) ESC does not consider that this is the corresponding Requirement but would welcome the Applicant's confirmation of this [AS-143].</p>	<p>Requirement 14 relates solely to the landscape and ecology implementation and maintenance of the operational power station site. Requirement 14 has been updated to require the landscape scheme to have been submitted for approval by ESC within 6 months of Unit 1 commencing operation. The landscape and ecology scheme must be carried out as approved. Yes, Requirement 14 is the requirement referred to at para 7.1.2 of the oLEMP [APP-588] (note now updated by [REP1-010]).</p>	<p>ESC notes that revision 4 of the draft DCO submitted for Deadline24 makes amendments to Requirement 14. ESC is content with the new 'trigger' for submission of the landscape scheme for approval by ESC.</p>
<p>DCO – the questions which follow relate to the Third Draft DCO [AS-143] and focus on the changes between the original – [APP-059] and the third draft. The previous questions in this section on the DCO should be answered in the light of the changes and take changes into account. They should explain how changes affect the answer.</p>					

DCO.1.143	ESC, The Applicant	<p>Art 10. Please will ESC comment on the appropriateness of adding the Main Development Site Design and Access Statement and the Associated Development Design Principles to the defences to statutory nuisance in this Article. In particular, are they sufficiently precise documents for this purpose?</p>	<p>The main development site design and access statement and the associated design principles document are not particularly precise and therefore ESC does not consider they should be included in this Article due to not being precise enough. However, the Applicant may be able to provide further reasoning as to their inclusion that may change our opinion in this regard, and we would welcome such an explanation.</p>	<p>The Main Development Site Design and Access Statement [APP-585 to APP-587, Doc Ref. 8.1Ad2 (A)] and the Associated Development Design Principles (Doc Ref. 8.3(A)) include controls and measures which relate to noise, vibration, dust or lighting. The Applicant considers these documents sufficiently precise for this purpose.</p>	<p>ESC maintains its previous position and considers that these two documents are not sufficiently precise to be included in this Article. For the purpose of being able to enforce in relation to noise, dust etc, ESC will need there to be more clarity in the design principles or a further mechanism for receipt of additional detail.</p>
DCO.1.158	The Applicant, SCC	<p>R 6A – is “general” accord with the Public Rights of Way Strategy appropriate? Why not “in accordance”?</p>	<p>The phrase, “in general accordance” is a potentially very wide scope which ESC does not consider is justified. This wording is used in a number of requirements [AS-143], not just 6A, and ESC therefore suggests that a general provision be inserted at the start of Schedule 2 - a</p>	<p>Requirement 6A has been updated to make the purpose of the footpath implementation plans clearer. These footpath implementation plans will set out the detail of how the Rights of Way and Access Strategy (Doc Ref. 6.3 15I(A)) is to be applied to each new</p>	<p>ESC maintains its previous position that the use of the phrase ‘in general accordance’ is too wide and therefore not justified (for full details, please see ESC’s response to DCO.1.158 submitted for Deadline 2). Hinkley Point C DCO used a combination of ‘general accordance’ and ‘accordance’. Lake Lothing Crossing used a combination of the two.</p>

			<p>new 1(2)(c) – that will ensure that all such uses of the term, “in general accordance” are covered in the same way.</p> <p>The following wording is suggested:</p> <p>“Where any requirement provides that the authorised development or any part of it is to be carried out in ‘general accordance’ with details, or a scheme, plan or other document that is listed in Schedule 22 and certified under Article 80 of this DCO, this means that the undertaker will carry out such work(s) in a way that is consistent with the information set out in those details, schemes, plans or other document and in a manner that does not give rise to any materially new or materially different environmental effects to those assessed in the environmental information.”</p>	<p>or diverted footpath. The footpath implementation plans are subject to Suffolk County Council’s approval. The measures in the strategy would apply differently in the context of each footpath. Therefore the Applicant is content that ‘<i>general accordance</i>’ is suitable to ensure that the impacts are no greater than those assessed in the Environmental Statement.</p>	
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FR.1 Flood risk, groundwater, surface water					
HW.1 Health and wellbeing					
HE.1 Historic Environment (terrestrial and marine)					
Sizewell Link Road					
LI.1 Landscape impact, visual effects and design					
Freight Management Facility					
Two Village Bypass					
MA.1 Marine water quality and sediment NO COUNCIL QUESTIONS					
MN.1 Marine Navigation NO COUNCIL QUESTIONS					
NV.1 Noise and Vibration					
NV.1.8	The Applicant	Requirements Do you agree the requirement suggested by ESC at 1.33 of their RR is appropriate? If not please explain your position.	n/a	SZC Co. does not agree that such a requirement is appropriate. In particular, SZC Co. does not agree that British Standard 4142: 2014+A1: 20198 requires an outcome where rating levels are 5dB below the background sound level. Reference to rating levels being below the measured background was taken out of British Standard in the 2014 revision. Such an approach is not required by the National Policy Statement (NPS), nor is it SZC	The requirement suggested by ESC at 1.33 of the RR is our default starting point for noise of this type. ESC agree with the Applicant's explanation of the assessment method for fixed plant noise, and in particular the requisite consideration of context. However, ESC also reiterate our previous comments (including in relation to questions NV.1.4 and NV.1.7) regarding the use of absolute noise limits as part of the contextual consideration. In accordance with BS 4142:2014+A1:2019 it may be appropriate to consider absolute noise levels where background and rating sound levels are low, but ESC consider that these should be derived in accordance with BS 4142 (and the accompanying guidance note issued by the Association of Noise Consultants in March 2020) and should consider potentially distinctive characteristics of the sound, rather than the 40 dB L _{night} value adopted by the Applicant based on the WHO Night Noise Guidelines, which address noise-

				<p>Co.'s understanding that a requirement to achieve rating levels 5dB below the background sound level is a policy requirement applied elsewhere by East Suffolk Council.</p> <p>Noise conditions or requirements based on the British Standard 4142 methodology must be capable of enforcement, and detecting whether a rating level post-development is 5dB below the background is verging on impossible. Either the rating level has to be measured closer to the source and extrapolated back, or highly complex measurement systems capable of directional/narrow band noise measurement are required.</p> <p>The least onerous outcome defined in British Standard 4142: 2014+A1: 20199 is a 'low impact', which occurs where the rating level does not</p>	<p>related effects on health but are largely based on research of health effects from transportation noise, with fewer distinguishing characteristics and which also do not consider the local context.</p>
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				<p>exceed the background sound level.</p> <p>British Standard 4142: 2014+A1: 2019 sets out an assessment method for considering fixed plant noise, provides indicative outcomes based on a numerical assessment, and requires relevant contextual elements to be taken into account before reaching a conclusion on the outcome.</p> <p>The application of British Standard 4142: 2014+A1: 2019 is discussed in paragraphs 1.3.33 to 1.3.39 in Volume 1, Appendix 6G of the ES [APP-171] and paragraphs 4.21 to 4.35 in Volume 1, Appendix 6G, Annex 6G.1 of the ES [APP-171].</p>	
NV.1.1.1	The Applicant	<p>Rail Noise</p> <p>The assessment [APP-546] does not appear to make clear how the mitigation of speed restriction, and stopping of trains at certain points</p>	n/a	<p>(i) The necessary controls over train speeds and stopping would be secured both within the DCO and contractually. Within the DCO, Requirement 25 specifies that night-time trains cannot be operated except in accordance with a Rail Noise Mitigation Strategy (RNMS) first submitted to and</p>	<p>The Applicant's response is considered to be reasonable, though we would emphasise that the Rail Noise Mitigation Scheme (RNMS), of which this specific mitigation measure is a part, is proposed as primary mitigation which is intrinsic to the current assessment of effects. Should this, or other parts of the RNMS not be deliverable, then the assessment of effects might need to be revised, and more emphasis potentially put on other means of</p>

		<p>along the line will be delivered through the DCO.</p> <p>(i) Please clarify how this would be achieved/delivered through the DCO.</p> <p>(ii) A train pulling 20 trucks is suggested to be what is likely to be used. Is this due to a physical constraint on site/on the line? If not, what controls would be in place to ensure this were the maximum size of train?</p> <p>(iii) What would the implications be if the train were to be longer? Has this been assessed?</p> <p>(iv) A train travelling at</p>		<p>approved by ESC. It is the night-time timing of the Sizewell C train services which generates the requirement for control.</p> <p>A draft of the RNMS is provided in Volume 3, Appendix 9.3.E of the ES Addendum [APP-258], submitted in January 2021. It sets out the precise nature of the controls necessary and would be enforceable against the Applicant.</p> <p>Contractually, the train services will be secured through the following:</p> <ul style="list-style-type: none"> a. A contract between SZC Co. and a freight operating company, in which SZC Co. will align its DCO obligations with the terms on which it contracts with the supplier of rail services; b. A Freight Customer Track Access Contract entered into between SZC Co. and Network Rail. This is a standard form of agreement which sets out the terms on which the 	<p>mitigation, including noise screens/barriers and/or the Noise Mitigation Strategy (NMS) thresholds.</p>
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		<p>20mph with 20 trucks would take how long to pass a single point? (v) How will the restriction on the number of trains and the timetable they are to operate to be adhered to/delivered through the DCO? (vi) Please describe how you envisage a typical timetable for delivery and departure of trains to and from the site would occur, so the effect on the site and the receptors along the rail routes can be fully understood. It may be helpful to support this with a plan indicating the locations and</p>		<p>customer is entitled to have services on the specified routes. Where the customer requires to take up those services, it issues a drawdown notice to Network Rail and its appointed freight operator who then enter into a Freight Track Access Contract aligned with the terms of this customer contract. This sequence allows SZC Co. to be indirectly involved in the terms of the Track Access Contract. c. A Freight Track Access Contract entered into between Network Rail and the freight train operator. SZC Co. would not be a party. The Office of Rail and Road (ORR) – the rail regulator has published standard forms for the Track Access contracts, which allow for “special terms”, including matters such as train speeds which apply to particular services. It is through these terms that the speed restrictions would be imposed, rather than a</p>	
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		<p>times the trains would be expected to be at each location.</p>		<p>general speed limit on the line – as the restrictions are only required for the Sizewell C night-time trains.</p> <p>(ii) Network Rail’s Freight Loads Book specifies a maximum train length of 339m for the East Suffolk Line. This would provide the necessary control. It is understood that this relates to the limitations of the signalling system, and safe operation of some types of level crossing. Assuming a train is made up of JNA or HOA wagons then it would consist of 20 wagons and one locomotive. HYA wagons are also being considered, and as these are slightly shorter, a train of the maximum permitted length would consist of 21 wagons.</p> <p>(iii) It would not be possible to operate a longer train so this has not been assessed. (iv) A maximum length 339m train would take approx. 38 seconds to pass a single point.</p>	
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				<p>(v) The DCO and contractual controls described at (i) above would also specify the number of trains and their timetable.</p> <p>(vi) An illustrative timetable is provided in Chapter 11 of the Consolidated Transport Assessment (Doc Ref. 8.5 (B)).</p>	
NV.1.1.1 2	The Applicant, Network Rail (part iii only)	<p>Rail Noise</p> <p>(i) The mitigation proposed appears to rely upon welds not being within a certain distance of sensitive receptors. What distance is required between receptor and the track to achieve the LOAEL and SOAEL levels?</p> <p>(ii) Please clarify where the measurements are taken from and to.</p> <p>(iii) How would this be delivered through the DCO?</p>	n/a	<p>(i) The specification and implementation of mitigation does not rely on the proximity and type of rail welds, rather, the potential effects are influenced by these factors. A range of values is set out in paragraph 4.3.26 in Volume 3, Appendix 9.3.A of the ES Addendum [AS-257], stating the distances between track and receptor at which the LOAEL and SOAEL are attained, for specific combinations of train speed, track type and rail joint type. Where there are properties that fall within the distance stated for SOAEL for the particular</p>	<p>ESC's main comment is as per NV.1.11. However, ESC would also query the Applicant's statement that; "As the expectation is that SOAEL will be avoided even where properties are within the distances stated, SZC Co. does not rely on the proximity of specific weld types to comply with policy". ESC consider that this statement can only be true if the policy aims of NPS EN-1 and the Noise Policy Statement for England (NPSE) are met. If the RNMS is not deliverable (which is currently uncertain based on the Network Rail SOCG dated 2 June 2021) then this would increase the emphasis on other forms of mitigation, including possible noise screens/barriers and/or the NMS thresholds, which might need to be lowered to offset this. This would need to be fully explored and discussed.</p>

				<p>combination of train speed, track type and rail joint type that is relevant to them, the expectation is that the Noise Mitigation Scheme (the original version of which was set out in Volume 2, Appendix 11H of the ES [APP-210] with a revised version provided as Doc Ref. 6.3 11H(A)), will apply and a sufficient reduction in noise entering the property via the airborne path is achieved so that the combined total of groundborne noise and low frequency airborne noise will be below SOAEL. Examples of where this outcome is expected are stated in paragraphs 9.3.81 to 9.3.83 in Volume 1, Chapter 9 of the ES Addendum [AS-188]. As the expectation is that SOAEL will be avoided even where properties are within the distances stated, SZC Co. does not rely on the proximity of specific weld types to comply</p>	
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				<p>with policy. (ii) The distances are measured from the track centreline to the façade of the receptor building, unless stated otherwise, for instance, some distances are quoted between the nearside rail and the receptor façade.</p> <p>(iii) The implementation of track renewal along sections of the line between Woodbridge and Saxmundham, which would permit the removal of aluminothermic welds, is the subject of active discussion with Network Rail. If those discussions demonstrate the benefit and deliverability of the improvements, they could be incorporated into the draft Rail Noise Mitigation Strategy (Volume 3, Appendix 9.3.E of the ES Addendum [APP-258]), which is secured through via Requirement 25.</p>	
NV.1.13	The Applicant, Network Rail	Rail Noise (i) The placement of matting under the ballast would	n/a	(i) Works to the Saxmundham to Leiston branch line are secured in the draft DCO (Doc	Please see response to NV.1.11.

	(part iii only)	<p>appear to be required for all locations where a sensitive receptor is within 20m of the centreline of the railway, and this matting should extend 10m beyond the end of the receptor building. How would this be delivered through the DCO?</p> <p>(ii) Does this require a specific standard of matting to be provided and method of laying of the matting and the ballast to meet the minimum noise absorption required and therefore is a specific minimum specification</p>		<p>Ref 3.1(C)) as Works 4C and through Requirement 18. The particular characteristics referenced in the question, however, are specified in the draft Rail Noise Mitigation Strategy which forms Volume 3, Appendix 9.3.E of the ES Addendum [APP-258]. Requirement 25 requires the detail of the Rail Noise Mitigation Strategy to be submitted to and approved by ESC before the operation of night-time trains and subsequently implemented.</p> <p>(ii) The under-ballast mat is required to achieve a specific standard, and an example of a product which has the required properties is included in Appendix A of the draft Rail Noise Mitigation Strategy, which is contained in Volume 3, Appendix 9.3.E of the ES Addendum [APP-258]. The principal requirement to be specified is the dynamic stiffness modulus. The proposed product must have achieved Network Rail “product acceptance”</p>	
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		<p>required? If so, how is this to be secured?</p> <p>(iii) Do Network Rail agree to this method of installation?</p>		<p>which will specify certain performance and installation requirements. The chosen product, with those performance and installation characteristics, will be part of the Track Approval In Principle documentation (the "Form A") accepted by Network Rail at the end of the next design phase which secures their place in the design.</p> <p>(iii) SZC Co. is engaging with Network Rail through a Basic Asset Protection Agreement (BAPA) to achieve successful Approval in Principle which will demonstrate their acceptance of this solution.</p>	
NV.1.14	The Applicant	<p>Rail Noise/Freight Management</p> <p>(i) The information provided in support of the train noise assessment indicates [APP 545]</p>	n/a	<p>(i) For the purposes of the rail bulk import capacity an import payload of 1,250t per train has been assumed. This has been derived based on the published operational parameters of the rail infrastructure. The Network Rail Sectional Appendix¹¹ states a Route Availability (RA) of the East Suffolk</p>	<p>ESC's main comment is as per NV.1.11. However, ESC would also query The Applicant's statement that; "As the expectation is that SOAEL will be avoided even where properties are within the distances stated, SZC Co. does not rely on the proximity of specific weld types to comply with policy". ESC consider that this statement can only be true if the policy aims of NPS EN-1 and the Noise Policy Statement for England (NPSE) are met. If the RNMS is not deliverable (which is currently uncertain based on the Network Rail SOCG dated 2 June 2021) then this would increase the emphasis on other</p>

		<p>that a typical truck has the capacity to carry 77.9t of cargo. Assuming this to be the case a train with 20 trucks would have a payload of 1,558t. Please explain why this figure exceeds the quantum of material said to be imported per train as set out in the Freight Management Strategy?</p> <p>(ii) Assuming trains were loaded to full capacity what implications would this have for the noise assessment?</p>		<p>line and Saxmundham to Leiston branch line as RA7 and a trailing weight of 1,730t (rounded to 1,800t as route planning assessed in 200t increments) per train. The RA7 category limits the axle load of each wagon to 21.5t, resulting in a gross wagon load of 86t. There are several different types of rail wagons that could be used to haul bulk materials via rail, each of these has slightly differing capacities and tare weights which impact of payload available. A typical JNA open wagon has a tare weight of 23.7t, therefore a maximum payload of 62.3t can be carried before the axle load limit is exceeded. This results in the wagon being only partially filled as the design capacity of a JNA wagon is 77.9t payload (101.6t gross) i.e. the total capacity would exceed the permitted axle load of the branch line. An alternative HOA hopper wagon (bottom discharge)</p>	<p>means of mitigation, including possible noise screens/barriers and/or the NMS thresholds, which might need to be lowered to offset this. This would need to be fully explored and discussed.</p>
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				<p>may also be used. This has a tare weight of 24.2t allowing a max payload of 61.8t. As with the JNA wagon, this wagon is only partially full as a HOA wagon has a design capacity of 77.8t payload (102t gross). The trailing weight restriction places a maximum gross weight of the wagons hauled by the locomotive to ensure sufficient traction and braking on the gradient of the line. The 1,800t limit on the Saxmundham to Leiston branch line results in a maximum of 20 wagons per train (20 x 86 = 1,720t). Therefore assuming 20 wagons this results in a rail import of between 1,236 and 1,246t, assumed as 1,250t per train. Considerable further rail enhancement beyond that being considered by the project, such as rail underbridge replacement and track bed</p>	
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				<p>renewals, would be required to permit the full capacity of the wagons to be utilised, therefore the maximum wagon payload capacity of 77.9t will not be achieved. For the purposes of noise and vibration assessment the theoretical maximum capacity of the rail wagons has been used, i.e. 77.9t payload. While this cannot be achieved due to the condition of the rail infrastructure it represents a conservative worst case for the assessment.</p> <p>(ii) The assessment assumed a payload of 77.9t per wagon, i.e. 1558t for a 20-wagon train, even though that total payload will not materialise in practice, as set out above. Further, the source of groundborne noise is unevenness of the surfaces of the rail head and the vehicle wheels, including both roughness (which occurs all along the rail and</p>	
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				<p>around the wheel tread) and discrete discontinuities such as joints and some types of weld. The magnitude of the effect caused by these features is primarily dependent on the unsprung mass of the wheelsets of the wagons and locomotives. Unsprung mass is not dependent on load. There is a small additional effect in the case of joints and welds due to the sprung mass, which includes the load, but it is dependent on the weight of individual wagon loads and not on the total payload of the full length train. Increasing the payload of the train as a whole has no effect on groundborne noise levels over and above the effect of any increase in the load on individual axles. The assessment of airborne railway noise has taken account of the range of locomotive power settings that may be required to move fully-loaded trains.</p>	
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				The source data on which the airborne noise assessment is based is set out in Volume 1, Chapter 9 of the ES Addendum [AS-188] and its associated Appendix 9.3.A (Volume 3 of the ES Addendum [AS-257]) .	
NV.1.1.1 6	The Applicant	Rail Noise In undertaking the noise assessment, a test train was run in August 2020, it is understood this was unladen. (i) How representative of the noise of a fully loaded train would this be? (ii) Please explain what differences in acoustic terms you could expect for acceleration and braking, relative to a fully laden train.	n/a	(i) In addition to the unloaded wagons that were used during the August 2020 tests, the train also included a locomotive at each end. The August 2020 tests are described in Volume 3, Appendix 9.3.A of the ES Addendum [AS-257] and its associated appendices. For each traverse, the engine at the front pulled the train, while the engine at the rear was effectively a dead load. The total train weight was approximately 772 tonnes and was considered sufficiently similar to real-life conditions that the tests could be considered representative. The train operators confirmed that the	Response noted. ESC are currently undertaking further reviews of the rail groundborne noise and vibration assessments and expect to provide further comment on this in due course.

				<p>operational characteristics of the leading engine in each traverse reflected the expected operation with a fully-loaded train.</p> <p>The source data that was used in the assessment of railway noise was collected prior to the submission of the DCO application, based on numerous measurements of freight trains. The source data and surveys were set out in Volume 9, Appendix 4B, Annex B of the ES [APP-546].</p> <p>The testing in August 2020 found that lower source noise levels would be appropriate, however, the assessment retained the original, higher noise levels.</p> <p>(ii) As stated in answer to (i) above, the operational characteristics of the leading engine in the test runs reflected the expected operation with a fully-loaded train. Accordingly, differences between the testing undertaken, and a</p>	
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				<p>fully-loaded train, are not expected.</p> <p>The locomotive is noisiest part of a freight train, and it is at its noisiest when operating under full power.</p> <p>The survey work that informed the noise assessment, as illustrated in Tables 1.4 and 1.5 in Volume 9, Appendix 4B of the ES (Doc Ref. 6.10) [APP-546] found that decelerating trains, i.e. braking trains, were found to generate lower sound levels than trains running at a steady speed, which were in turn quieter than trains running at full power.</p>	
NV.1.1.18	The Applicant, ESC, SCC	<p>Rail SOAEL and LOAEL</p> <p>The SOAEL and LOAEL is based at least in part on the assessment for HS2, and the justification of a higher rating appears to be based on the quantum and speed of rail</p>	<p>Notwithstanding the obvious differences between a new high-speed rail line and rail traffic serving the construction of a power station, the technical basis for the adopted LOAEL and SOAEL is accepted.</p> <p>However, the overarching policy aims of NPS EN-1 require that all efforts are</p>	<p>Reference is made to High Speed Two (HS2) in two contexts:</p> <ul style="list-style-type: none"> • The derivation of a SOAEL for airborne railway sound in terms of L_{AFmax}; and • The derivation of SOAEL for groundborne noise. <p>In both respects, the Sizewell C noise assessment is more stringent than the HS2 assessment.</p>	<p>We agree with the Applicant's overarching point that the derivation of SOAEL for airborne and groundborne rail noise are more stringent than those adopted for HS2, although we do not consider the updated approach to assessing groundborne noise from rail to represent a lowering of the SOAEL, more that this approach is more onerous because two simultaneous sources (airborne/groundborne) are assessed against the previously nominated LOAEL and SOAEL values, rather than one. This does not</p>

		<p>traffic associated with HS2 as opposed to here.</p> <p>(i) Do the Councils agree this is a reasonable position to take in setting the SOAEL and LOAEL for rail noise?</p> <p>(ii) In the event the Councils do not agree, what method would be considered would provide a reasonable approach in the circumstances of this case?</p>	<p>taken to mitigate adverse effects above LOAEL and to avoid significant adverse effects above SOAEL. As such, adequate consideration of mitigation is critical to the correct use of these parameters. ESC does not currently consider that the Applicant has adequately explored and exhausted all mitigation options to “mitigate and minimise” adverse impacts, or that the Rail Noise Mitigation Scheme and the Noise Mitigation Scheme provide adequate protection for residents. Specifically, we consider that the Noise Mitigation Scheme should be triggered at a level below SOAEL, which simply represents a threshold to be avoided. Discussions are ongoing on this between the Applicant and ESC and progress is expected, but this remains a key concern.</p>	<p>In particular, for airborne railway noise, the L_{AFmax} SOAEL references HS2, but the value adopted in the SZC noise assessment is a more stringent value than adopted for HS2. HS2 adopted two values for the L_{AFmax} SOAEL, which varied according to the number of trains per night; a value of 85dB L_{AFmax} was adopted where there were 20 trains or fewer, or 80dB L_{AFmax} where there were more than 20 trains per night. For SZC, the more stringent 80dB L_{AFmax} was adopted even though there are expected to be less than 20 trains per night.</p> <p>Volume 9, Chapter 4 of the ES [APP-545] adopted a value for SOAEL of 50dB L_{ASmax} for groundborne noise considered in isolation; this is 5dB less stringent than HS2’s equivalent figure, although it is noted that in the HS2 case there may be 20 or more groundborne noise events per hour.</p>	<p>however, affect our agreement that this is more onerous than previously.</p>
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				<p>Groundborne noise was developed further in Volume 1, Chapter 9 of the ES Addendum [AS-188] and Volume 3, Appendix 9.3.A of the ES Addendum [AS-257] where it is proposed that combined groundborne noise and airborne noise should be assessed against the LOAEL and SOAEL values for groundborne noise alone, namely 35 dB L_{ASmax} and 50 dB L_{ASmax} respectively. This approach effectively lowers the SOAEL for groundborne noise alone, by an amount dependent on the relative levels of groundborne and airborne noise as received. This change in approach was considered appropriate in this instance due to the unique circumstances at Sizewell C, where airborne and groundborne noise are likely to combine in a manner not addressed in previous groundborne noise assessments.</p>	
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<p>NV.1.1 9</p>	<p>The Applicant, ESC, SCC, PHE</p>	<p>Rail SOAEL and LOAEL As currently assessed, the LOAEL would be exceeded at receptors within 42m of the line with trains travelling at 10mph and within 50m of the line for trains travelling at 20mph. In light of the need to protect human health from noise, and length of construction period should not the potential for noise mitigation be made available to all receptors where the LOAEL would be exceeded?</p>	<p>Ideally, setting the threshold for noise insulation mitigation at LOAEL would represent the most robust possible means of protecting amenity. However, there is no clear basis for this, and ESC recognise that other forms of mitigation exist that could negate the need for improved noise insulation, which should be a last resort.</p> <p>However, ESC considers that eligibility for noise insulation should be triggered at a level below SOAEL, which simply represents a threshold to be avoided. Discussions are ongoing on this between the Applicant and ESC and progress is expected, but this remains a key concern.</p>	<p>It is a requirement of the Noise Policy Statement for England¹² and the Overarching National Policy Statement for Energy (NPS EN-1)¹³ to mitigate and minimise noise falling between LOAEL and SOAEL, with the NPS stating that all reasonable steps should be taken in this endeavour while also taking into account the guiding principles of sustainable development (paragraph 2.24).</p> <p>The draft Rail Noise Mitigation Strategy, which is contained in Volume 3, Appendix 9.3.E of the ES Addendum [AS-258], sets out the proposed operational and physical measures to limit railway noise and vibration, which has effect at properties affected by railway noise irrespective of whether they fall above or below LOAEL or SOAEL. The measures include:</p>	<p>The Applicant emphasises the draft Rail Noise Mitigation Strategy (RNMS) as a “<i>reasonable and proportionate response to the potential adverse effects</i>” due to rail, and that together with the enhanced insulation to properties that would be offered “<i>where necessary</i>” as part of the Noise Mitigation Scheme (NMS), that this provides a comprehensive mitigation package. However, ESC remains concerned that there is uncertainty regarding the deliverability of the full package of measures forming the RNMS. We understand that the RNMS is proposed as primary mitigation and therefore the updated assessment of effects assumes that these would be adopted in their entirety. If these measures are not deliverable, then this would presumably change the assessment of effects. Furthermore, the revised NMS eligibility thresholds (in line with the EIA significance) are welcomed, but if the RNMS is not deliverable then no other physical mitigation is currently proposed between LOAEL and SOAEL. This would emphasise the policy aim to exhaust all other forms of mitigation before considering enhanced insulation, particularly in terms of noise barriers/screening. Based on the current Network Rail (NR) SOCG (2 June 2021) we understand NR have no objection in principle to acoustic fencing on their land if required, provided this was funded by the Applicant. ESC</p>
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				<ul style="list-style-type: none"> • Installation of a crossover north of Saxmundham station and upgrades to the signalling system to permit trains to join or leave the Saxmundham to Leiston branch line without stopping, known as the 'change arrangements at Saxmundham'. • The Saxmundham to Leiston branch line will be upgraded with a refurbished trackbed, concrete or steel sleepers, and welded rails to provide a consistent rail cross-section consistent gauge, and smooth running surface. • The proposed rail extension route will be constructed using the same approach as the upgraded Saxmundham to Leiston branch line. • Under ballast mats will be installed where the Saxmundham to Leiston branch line or proposed rail extension route pass within 15m of a residential receptor, and will 	<p>have already requested that the Applicant explore this mitigation option (as noted in the noise and vibration SOCG) and are currently awaiting a response from the Applicant on this. If it ends up the case that there are very few practical mitigation measures that could be used to <i>"mitigate and minimise"</i> effects above LOAEL, then ESC also consider that the NMS thresholds for airborne rail noise might need to be reduced further to offset this limitation.</p>
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				<p>be installed for a minimum of 10m either side of the property. An alternative design may be substituted, if its effectiveness is equal and approved.</p> <ul style="list-style-type: none"> • Night-time speed limits of 10mph will apply at three locations along the East Suffolk line: Woodbridge/Melton, Campsea Ashe, and Saxmundham. • Speed on the Saxmundham to Leiston branch line will be limited to 10mph during the early years. • Pending the results of further assessment of the upgraded and mitigated Saxmundham to Leiston branch line during the early years operation, the speed limit on Saxmundham to Leiston branch line may be increased to 20mph. This further assessment work is described later in this section. • The speed limit on the proposed rail extension route will match that applied to the 	
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				<p>Saxmundham to Leiston branch line. This enables constant train speeds to be maintained, thereby avoiding accelerating locomotive noise close to the northwestern corner of Leiston.</p> <ul style="list-style-type: none"> • Class 66 locomotives will be used in preference to Class 68 locomotives, where there is equivalent choice. • Night-time construction trains will not travel into or out of Leiston, instead being held on the Saxmundham to Leiston branch line to the west of the Saxmundham Road level crossing, at defined locations. • Construction trains stabled overnight on the branch line will not be permitted to keep their engines idling. <p>These measures, together with the extensive associated development proposed as part of the application which is primarily aimed at mitigating transport effects, are considered to be a reasonable and proportionate response to the</p>	
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				<p>potential adverse effects identified to result from the use of trains as part of the SZC project. Together with insulation where necessary, as provided by the Noise Mitigation Scheme (the original version of which was set out in Volume 2, Appendix 11H of the ES [APP-210] with a revised version provided as Doc Ref. 6.3 11H(A)), it provides a comprehensive mitigation package.</p>	
NV.1.25	The Applicant	<p>Rail Noise In light of the length of time that the construction period would last, would not occupiers of properties within close proximity of the rail line need to be rehoused for the duration to avoid being subject to regular</p>	n/a	<p>The effects of noise, vibration and groundborne noise have been fully assessed against the principles of the National Policy Statement for Energy (NPS EN-1)¹⁷ and the Noise Policy Statement for England¹⁸, particularly in terms of LOAEL and SOAEL. As set out in Volume 3, Appendix 9.3.A of the ES Addendum [AS-257] no receptors will experience effects greater than SOAEL, and mitigation proposed will minimise noise above LOAEL.</p>	<p>The Applicant’s comments regarding the draft Deed of Obligation are noted. The Applicant also states in their response that “no receptors will experience effects greater than SOAEL, and mitigation proposed will minimise noise above LOAEL”. ESC do not currently consider that the mitigation proposals do meet the policy aim to mitigate and minimise noise above LOAEL or to exhaust all other forms of mitigation before considering enhanced noise insulation, such as might need to be provided through the NMS. The revised NMS eligibility thresholds are welcomed, but no other physical mitigation is currently proposed between LOAEL and SOAEL, except the RNMS. The RNMS is presented as primary mitigation, but Network Rail have not yet committed to being able to deliver these measures. This further emphasises the importance of achieving</p>

		<p>significant disturbance? (Currently the ES suggests that the SOAEL would be exceeded at a distance of 5m at 10mph but this would not yet appear to be an agreed position.) The s106 agreement [PDB-004] explains on pg 77 that the Noise Mitigation Scheme will either be secured through the DCO or the s106 agreement, but this is still under consideration please explain the latest position on how this mitigation would be secured</p>		<p>This being the case, there is no need for rehousing. Having reflected on the nature of the steps set out in the Noise Mitigation Scheme (the original version of which was set out in Volume 2, Appendix 11H of the ES [APP-210] with a revised version provided as Doc Ref. 6.3 11H(A)) and discussed the matter in the Noise topic meetings with ESC and SCC, SZC Co. believes it would be sensible to secure the Scheme via Schedule 12 of the draft Deed of Obligation (Doc Ref. 8.17(C)). ESC and SCC have recognised that may be the most appropriate route. It is intended that the Scheme be 'de-constructed' into a series of discrete, sequential steps within the draft Deed of Obligation (Doc Ref. 8.17(C)) to ensure that each step is clear. The use of the draft Deed of Obligation (Doc Ref. 8.17(C)) will also enable the parties to enforce against each other as some of the steps</p>	<p>the policy aim to exhaust all other forms of mitigation before considering enhanced insulation, particularly in terms of noise barriers. Based on the current Network Rail (NR) SOCG (2 June 2021) we understand NR have no objection in principle to acoustic fencing on their land if required, provided this was funded by the Applicant. ESC have already requested that the Applicant explore this mitigation option to ensure that noise above LOAEL would be minimised as far as practicable (as noted in the noise and vibration SOCG) and are currently awaiting a response from the Applicant on this. If some or all of these measures cannot be delivered, then ESC also consider that the NMS thresholds for airborne rail noise might need to be reduced further to offset this limitation.</p>
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				<p>require action from ESC before the next step in the sequence can be implemented. These principles are not controversial between the parties although the precise final terms of the Scheme are the subject of discussions as part of the Statement of Common Ground and progressing the Deed of Obligation.</p>	
NV.1.2 6	The Applicant, Network Rail, ESC, SCC	<p>Rail Noise In order to minimise disturbance to receptors in close proximity to the rail line, particularly at night, would a period excluding train operations be reasonable and or enforceable?</p>	<p>Ideally, from a noise impact perspective, ESC would prefer there to be no freight train movements at night because this is a new source and there is clearly much greater potential for disturbance at night. However, ESC understands that the Applicant has engaged with Network Rail extensively on this point and that there is insufficient capacity during the day to accommodate the freight paths. Running all trains during the daytime would clearly negate any potential</p>	<p>The timing of trains would be specified in the Freight access contracts, which are explained in response to Question NV.1.11 in this chapter and therefore enforceable. However, there is limited ability to ‘choose’ the timing of train operations. Night-time operations are necessary due to the absence of pathing capacity in the day. At night the scheduling of trains will be a function of the capacity available within the network</p>	<p>ESC agree with the Applicant’s explanation of why a night-time exclusion period would be impractical. However, this again emphasises the importance of the RNMS and NMS (and potentially noise barriers/screens) in mitigating airborne rail noise impacts. If the RNMS cannot be delivered as currently proposed and/or noise barriers are demonstrated to be impractical/ineffective, then ESC consider that the NMS thresholds for airborne rail noise may need to be reduced further to offset this and ensure the policy aims of NPS EN-1 are met, as this would affect the balance of acceptability.</p>

			<p>night-time impacts, but the Applicant has stated that this would not be practicable within the constraints on the line.</p> <p>We also understand that the timetable for the night rail, particularly at peak use, is relatively restricted however if a period where movements were excluded in the most sensitive part of the night could be accommodated and this did not unreasonably increase impact from movements in the more condensed periods before and after it would be worth considering but would require assessment first.</p> <p>In terms of enforceability, it should be a relatively simple matter as other than survey and maintenance trains we understand the only night rail traffic is as a result of the Sizewell C project, if trains were moving within any exclusion period then it</p>	<p>timetable. The work undertaken on this has shown the ability to secure 7 train movements. The addition of timing limitations would be very likely to reduce that number</p> <p>– especially as the slowed speed of the trains means that each one takes a considerable time to travel from the main line at Ipswich to site. Limiting train numbers would act against the policy imperative in the NPS to prefer train-borne freight where cost effective.</p> <p>The Applicant’s view is that the balance lies in favour of securing the available capacity at night but ensuring that impacts are appropriately mitigated. Once established, the timetable would be fixed, creating certainty about the timing of the Sizewell C freight trains.</p> <p>An illustrative timetable is provided in Chapter 11 of the Consolidated Transport Assessment (Doc Ref 8.5(B)).</p>	
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			would be easier to determine the source.		
NV.1.2 8	ESC, SCC,PHE	<p>Rail Noise</p> <p>It would appear that the ES recognises a significant harm to between 100 and 110 properties. Would this accord with NPS EN1 Policy to avoid harm to human health, or the aims of the Noise Policy Statement for England? Do the Councils or PHE consider the approach justified in seeking to set a SOAEL at a higher level than the significant level identified through the ES assessment?</p>	<p>The overarching policy aims of NPS EN-1 require that all efforts be taken to mitigate adverse effects above LOAEL and to avoid significant adverse effects above SOAEL. As such, adequate consideration of mitigation is critical to the correct use of these parameters. ESC does not consider the Applicant has adequately explored and exhausted all mitigation options to “mitigate and minimise” adverse impacts, or that the Rail Noise Mitigation Scheme provides adequate protection for local residents. Specifically, we consider that the scheme should be triggered at a level below SOAEL, which simply represents a threshold to be avoided. Discussions are ongoing on this between the Applicant and ESC and</p>	<p>While not a question for SZC Co. to respond to, it should be clear that the number of 100 to 110 properties relates to the number of properties expected to have night-time L_{AFmax} noise levels of between 70 and 77dB, which would be considered to be subject to a significant adverse effect, in an EIA context. There is no direct link between a medical ‘harm’ and these outcomes and it is not SZC Co.’s position that the occupants of these properties will be subject to “significant harm”.</p>	<p>The Applicant’s comment that there is no direct link between the threshold of significance in EIA terms and medical ‘harm’ is noted. However, the Applicant has not responded to the ExA’s query about whether this would accord with the aims of Noise Policy Statement for England (NPSE). On this specific point ESC would emphasise our previous response to this question, in relation to the overarching policy aims of NPS EN-1 and the NPSE. Specifically, ESC does not consider the Applicant has adequately explored and exhausted all mitigation options to “mitigate and minimise” adverse impacts. Again, the revised lower NMS eligibility thresholds (in line with the EIA significance) are welcomed, but if the RNMS is not deliverable then ESC consider that the NMS thresholds for airborne rail noise might need to be reduced further to offset this and deliver an acoustically viable rail freight strategy.</p>

			progress is expected, but this remains a key concern.		
NV.1.2 9	ESC	<p>Rail Noise The Applicant concludes [APP 545] that up to 460 properties would be subject to noise above the L_{Amax} based LOAEL. Do you agree that the secondary mitigation offered would minimise the adverse effects on health and quality of life?</p>	<p>ESC understands that the Noise Mitigation Scheme is now referred to as “Secondary” mitigation, where it was previously referred to as “Other” mitigation in the original assessment (ES Vol 9 Ch 4).</p> <p>ESC does not currently consider that the Applicant has adequately explored and exhausted all mitigation options to “mitigate and minimise” adverse effects on health and quality of life (between LOAEL and SOAEL). Primary mitigation proposals are currently limited to track engineering (material upgrades and improvements) and operational restrictions, and other mitigation options exist which have not been considered and could effectively “mitigate and minimise”.</p>	<p>While not a question for SZC Co. to respond to, it is noted that the number of 460 properties relates to the total number of properties expected to be subject to railway L_{AFmax} noise levels above LOAEL, but does not include those above SOAEL.</p> <p>The Noise Mitigation Scheme, the original version of which can be found in Volume 2, Appendix 11H of the ES [APP-210], has been amended following discussions with ESC so that noise insulation will be offered when maximum sound levels from trains exceeds 73dB L_{AFmax} (as a façade level, equivalent to 70dB as a free-field value).</p> <p>The updated version of the Noise Mitigation Scheme is provided as Doc Ref. 6.3 11H(A).</p>	<p>The Applicant’s response highlights the revised NMS thresholds. Again, this is welcomed but ESC would reiterate that delivering the RNMS is fundamental to the current assessment of effects and if the RNMS is not deliverable then then ESC consider that the thresholds might need to be reduced further to offset this and deliver an acoustically viable rail strategy.</p>

			<p>NPS EN-1 clearly states that “it may be appropriate for the Planning Inspectorate to consider requiring noise mitigation through improved sound insulation to dwellings” but only in situations “when all other forms of noise mitigation have been exhausted”. This is an important distinction because it suggests that offering improved sound insulation to eligible properties should be the last resort in terms of mitigation.</p> <p>The Planning Practice Guidance for noise (PPG) also reflects this position, stating that there are four broad types of noise mitigation:</p> <ol style="list-style-type: none">1. Engineering (reducing noise at source)2. Layout (using distance and good		
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			<p>design to reduce impacts)</p> <p>3. Planning conditions/obligations (e.g. restricted activities)</p> <p>4. Mitigation through noise insulation (for dwellings).</p> <p>Clearly, there is both potential and a policy-based intention for all forms of mitigation to be considered to “mitigate and minimise” adverse effects on health and quality of life. ESC has discussed this with the Applicant, who is currently carrying out an exercise to explore other options for mitigation, including trackside screening. This process could satisfy ESC’s concerns, but this is ongoing.</p>		
NV.1.49	The Applicant, ESC, SCC	Two Village Bypass In light of the recognised significant adverse effects that would arise	ESC defers to SCC as local highway authority to respond to this question as operational noise from new road schemes is under the responsibility of the local highway authority.	The DCO application falls to be considered primarily against the policy requirements of the NPSs. Compliance with the terms of the NPSs would provide a strong indication that a	The Applicant’s response is noted, although ESC’s understanding is that the policy aims of NPS EN-1 and the NPS (mitigate/minimise above the LOAEL, avoid at the SOAEL) are part of the Government’s policies on sustainable development. If these policy aims are not met then this part of the proposed

		<p>from the use of the two village bypass during operation, can this be regarded as sustainable development?</p>		<p>proposal accords with government policy, including policies for sustainable development which involve the need to balance economic, social and environmental considerations. The NPSs are deliberately drawn to be wide ranging and to encompass all of those matters which Government considers are most directly relevant to the assessment of proposals for nationally significant infrastructure. There is no 'other' policy test which sits outside and above the NPSs. Even if the two village bypass were a stand-alone project assessed on its own merits, it would be appropriate to also recognise the significant benefits that it brings, along with the support for the principle of the bypass apparent through successive consultations, including the consistent support for a bypass from the</p>	<p>development might arguably not be sustainable in terms of noise.</p> <p>It is our understanding that SCC are currently undertaking further reviews of the road traffic noise and vibration assessments and further comments may be provided by SCC in due course.</p>
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				<p>affected parish councils, the District Council and the County Council.</p> <p>A bypass of at least the two villages is supported in the East Suffolk Local Plan (at paragraph 3.31) and in the Infrastructure Delivery Plan at Appendix B of the Plan, which describes the bypass as 'essential'. In this context, 'essential' is defined in the Plan as:</p> <p><i>“Essential infrastructure is the infrastructure that is necessary to support and mitigate development and ensures policy objectives of the Local Plan are met. Development could take place without this infrastructure but its sustainability would be undermined.”</i></p> <p>The bypass, therefore, is recognised by the Local Plan to bring sustainability benefits.</p> <p>No party that supports the bypass can expect that it would not involve some adverse</p>	
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				<p>effects – for instance, in noise or landscape or ecology terms but the fact of some adverse effects is not such as to outweigh the benefits of the bypass or the need for it. Noise effects of the type referenced in the question also need to be considered in the context of other considerations. As the Noise Policy Statement for England explains (at paragraphs 2.17 and 2.18), noise effects need to be considered in the context of the Government’s policy for sustainable development, which means that:</p> <p><i>“This should avoid noise being treated in isolation in any particular situation, i.e. not focussing solely on the noise impact without taking into account other related factors.”</i></p> <p>Even if the noise effects were to be taken in isolation and even if the bypass was considered on its own merits without reference to its wider role and benefits, its noise</p>	
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				<p>effects are not such as to trigger the policy test at NPS EN-1 paragraph 5.11.9 because significant adverse effects on health and quality of life are avoided.</p> <p>Taken as a whole, however, and seen in its proper context, the two village bypass forms an important component of the mitigation measures necessary to ensure the delivery of nationally important infrastructure. In that context, it benefits from very strong policy support.</p>	
NV.1.5 9	The Applicant, ESC	<p>Night Time Noise</p> <p>(i) On the basis that a value of 40dB L_{night} represents a level where adverse effects begin to occur in locations with a low background noise level at night on what basis has a level of 60dB been assessed to</p>	<p>The question is unclear to ESC because it appears to be based on comparing a night-time LOAEL value with a daytime SOAEL value. We are unsure that the 60dB quoted is correctly quoted, we are assuming that it was intended to read 60dB L_{max}. If this assumption is correct, we can respond at a later deadline.</p>	<p>(i) In responding to this question, it is assumed that the 60dB referred to is the 60dB L_{AFmax} level identified as a LOAEL in a number of the assessments.</p> <p>Noise assessed using the L_{night} parameter is different to noise assessed using the L_{AFmax} parameter. The L_{night} is the equivalent continuous level of noise events in the 8 night-time</p>	<p>ESC remain unclear what the “60 dB” in the question relates to, and while the Applicant has attempted to respond, ESC request again that the specific parameter be clarified so that ESC can provide an appropriate response.</p>

		<p>represent only a low impact? (ii) How has this figure been arrived at? (iii) Can this be reasonably argued to avoid adverse health effects when the WHO guidance recognises that adverse health effects are identified at night when levels exceed 40dB L_{night-outside}.</p>	<p>However, ESC does not agree that “a value of 40dB L_{night} represents a level where adverse effects begin to occur in locations with a low background noise level at night” and consider that night-time absolute noise levels from the operational power station should be assessed using an alternative criterion which considers the character of the sound. This criterion should be set in accordance with BS 4142:2014+A1:2019.</p>	<p>hours between 23:00 and 07:00 hours over a period of one year, whereas L_AF_{max} is the highest noise level that occurs in a given period. These terms are explained in the Glossary in Volume 1, Appendix 6G of the ES [APP-171]. There is no fixed correlation between the two, as they relate to different ways of quantifying sound. An exceedance of a 40dB L_{night} threshold does not indicate an exceedance of a 60dB L_AF_{max} threshold, and vice versa. (ii) The derivation of the 60dB L_AF_{max} value is set out in Volume 1, Appendix 6G, Annex 6G.1 of the ES [APP-171], starting at paragraph 5.78. (iii) For the reasons explained above, yes, it can; the two methods of quantifying cannot be directly correlated, so conclusions based on one measure of sound, will not have meaning for the other.</p>	
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<p>NV.1.6 3</p>	<p>The Applicant, ESC (Part iii) and iv) only)</p>	<p>Noise Mitigation Scheme (NMS) Please explain how this scheme [APP-210] would operate to protect living standards for residents such that they were not significantly affected. (i) How would the mitigation offered protect gardens? (ii) How would the noise environment within properties be protected to an acceptable degree when windows were open? (iii) Do the Council consider the mitigation scheme as drafted sufficiently clear and enforceable such that receptors would</p>	<p>(iii) ESC does not consider the mitigation scheme as currently drafted to provide adequate protection to receptors.</p> <p>Discussions are ongoing with the Applicant in relation to the thresholds for eligibility (particularly for Main Development Site construction, and night-time rail noise), consideration of building construction(s) (particularly in relation to listed and/or protected buildings), and a process to ensure eligibility is assessed based on a refreshed noise assessment once the proposals are more developed.</p> <p>(iv) ESC has no particular preference with how this would be better secured, although there are practical reasons why securing through S106 would be more</p>	<p>(i) The Noise Mitigation Scheme (the original version of which was contained in Volume 2, Appendix 11H of the ES [APP-210] with a revised version provided as Doc Ref 6.3 11H(A), is a scheme for improving the insulating performance of properties; there will be no effect from the scheme in gardens. The principles of this approach are well-established through the Noise Insulation Regulations that apply to road and railway schemes^{29, 30}. (ii) The benefits of the Noise Mitigation Scheme will occur when windows are closed, however, the scheme allows for the installation of an alternative means of ventilating the properties, such as the through-wall ventilation system required by the Noise Insulation Regulations that apply to road and railway schemes^{31, 32}. (iii) No response from SZC Co. is required.</p>	<p>In line with relevant policy, ESC reiterate that the NMS should be a last resort and the aim should be to mitigate / minimise noise via other means of mitigation where possible. This applies to road and rail noise, but also to construction noise. The Code of Construction Practice should ensure that this policy aim is met through the planning and implementation of construction works, to ensure that the NMS would only ever be required as a last resort.</p>
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		be adequately protected? (iv) Do the Council consider this would be better secured through the DCO or S106?	efficient in terms of coordination/programme.	(iv) No response from SZC Co. is required.	
NV.1.68	The Applicant, ESC, PHE	Rail Noise In the event that having the SOAEL at a higher level than the significant adverse effect level identified from the ES Assessment was not considered to be justified, do the 100-110 properties identified as being potentially subject to such noise levels need to be subject to noise mitigation for the scheme to avoid adverse health effects and be compliant with	Yes, ESC consider that properties exposed to rail noise levels above the EIA threshold for significant adverse effects (70 dB L_{AFmax}) should be eligible to apply for enhanced sound insulation under the Noise Mitigation Scheme, rather than at the higher SOAEL value, which is just the level to be avoided.	It is SZC Co.'s position that the SOAEL and the level at which significant adverse effects may occur in an EIA context need not align. In response to questions posed by ESC, further justification for this position was set out in a paper appended to SZC Co.'s responses to ESC's requests for information, which is itself appended to the draft Statement of Common Ground with ESC. Please also refer to the explanation in response to Question NV.1.75 of this chapter. Nevertheless, the revised Noise Mitigation Scheme (the original version of which was contained in Volume 2, Appendix 11H of the ES [APP-210] with a revised version	The Applicant's justification for the separation of EIA significance and SOAEL is accepted by ESC. The revised lower NMS thresholds (in line with the EIA significance) are welcomed, but if the RNMS is not deliverable then ESC consider that the NMS thresholds for airborne rail noise might need to be reduced further to offset this and deliver an acoustically viable rail strategy.

		NPSE and NPS EN1 policy?		provided as Doc Ref 6.3 11H(A) now adopts a lower threshold of eligibility, aligned with the significant adverse effect level, in an EIA context. This amendment was made at ESC's request. The 100 to 110 properties identified as being potentially subject to significant adverse effects, in an EIA context, would be eligible for insulation under the revised scheme.	
NV.1.74	The Applicant, ESC (Part iii) only)	<p>Mitigation Assessment [APP 545] para 4.7.5</p> <p>(i) How will the assessment be made where a balance needs to be struck between acoustic benefit and visual harm?</p> <p>(ii) Who would be the decision maker? (iii) Do you agree this is an appropriate</p>	ESC is unable to answer this question at this time. We would need sight of the Applicant's responses to parts (i) and (ii) in order to respond to part (iii).	<p>(i) The screening envisaged in paragraph 4.7.5 in Volume 9, Chapter 4 of the ES [APP-545] was for the construction phase of the works only. While there will need to be a balance between acoustic benefit and adverse visual impacts, the screens would be temporary and only present for the duration of the works in that location.</p> <p>(ii) The mechanism for installing any such screening would fall under the Code of</p>	<p>The Applicant's response to this question is noted and ESC consider this reasonable.</p> <p>However, ESC do note that the CoCP does not contain any discussion on the balance between acoustic benefit and visual harm and how any final decisions on the locations and of screening will be made.</p>

		method of assessing this planning balance?		Construction Practice (Doc Ref 8.11(B)), which will be subject to agreement with ESC. (iii) No response from SZC Co. is required.	
NV.1.75	The Applicant, ESC (part iv)	Precedents from previous DCO and legal cases Reference is made to two previous projects (Thames Tideway Tunnel and Heathrow) in order to justify setting a SOAEL at a different level from the level that might be regarded as having a significant adverse effect. (i) Please explain how the two cases referred to are similar to this DCO such that this approach could reasonably be justified in this case.	(iv) We recognise the basis for this approach in some cases, but ESC does not see it as our role to decide whether it is justified in this case. However, regardless of whether the EIA significance threshold and SOAEL are aligned, this does not detract from the overarching policy requirement to “mitigate and minimise” adverse effects and avoid significant adverse effects. In this case, considering the scale and duration of the development, if the two thresholds are not aligned then ESC consider that the threshold for eligibility for the noise mitigation scheme should be the lower of the two values, to ensure that	(i) Since the publication of the Noise Policy Statement for England in 2010, and the introduction of the concepts of LOAEL and SOAEL into the practice of assessing schemes in the planning process, it has been necessary to reconcile different uses of the word “significant”. This issue arises in the assessment of many Nationally Significant Infrastructure Projects (NSIP) and non-NSIP projects, and is not dependent on the nature of the project or its comparability to SZC. Under the NPSE and the NPS policies that incorporate its principles, the policy is to avoid significant adverse impacts on health and quality of life; below the SOAEL, other adverse	ESC note the Applicant’s response but reiterate our previous response to this; regardless of whether the EIA significance threshold and SOAEL are aligned, this does not detract from the overarching policy requirement to “mitigate and minimise” adverse effects and avoid significant adverse effects, and if the two thresholds are not aligned then the threshold for eligibility for the noise mitigation scheme should be the lower of the two values.

		<p>(ii) Please provide copies of the decisions and point out from each the explanation and justification provided in those cases.</p> <p>(iii) The Cranford Case would not appear to be a NSIP Case but a S78 appeal against the specific requirements of the 'Cranford Agreement'. Please explain how you consider those circumstances comparable to the current scheme.</p> <p>(iv) Do the Council agree that setting the SOAEL at a different level from that regarded as</p>	<p>the overarching policy requirements will be met.</p>	<p>impacts on health and quality of life should be mitigated and minimised.</p> <p>The EIA Regulations³⁴ are concerned with the identification of likely significant effects. The EIA Regulations further require a description of measures to 'avoid', 'prevent', 'reduce', or 'offset' significant adverse effects. Importantly, these references to 'avoid', 'prevent', 'reduce' and 'offset' are apt to include both policy responses under the NPS: i.e. avoidance of levels above the SOAEL, and mitigation and minimisation between the LOAEL and the SOAEL.</p> <p>The concept of significance in an EIA context is therefore broader than the SOAEL. 'Significant' effects in an EIA context include effects above and below the SOAEL. An ES is required to detail response measures in respect of both. Within that broader EIA context of significance,</p>	
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		<p>significant in the ES is justified?</p>		<p>national policy has identified the SOAEL as the level at which the response should specifically become one of avoidance. This difference in approach to 'significant' between noise policy and in an EIA context needs to be recognised and properly reflected in the assessment.</p> <p>The different approach is also seen in the fact that the policy is specifically to avoid significant adverse impacts on health and quality of life. It is sensible to consider what that term should mean.</p> <p>Equating such impacts with any significant effect in an EIA context would fail to recognise that noise policy adopts a tiered approach with different responses specified for impacts below the LOAEL, between the LOAEL and SOAEL, and above the SOAEL. There may be effects below SOAEL which are nevertheless significant in an EIA context, even if they do</p>	
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				<p>not reach a level which would have a 'significant adverse effect on health and quality of life', as that term is understood by reference to the PPG and NPSE.</p> <p>Furthermore, the NPSE sets its aims by reference to effects on health and quality of life, and as far as noise and vibration are concerned established practice is to correlate such effects against absolute measures of noise and or vibration. This is why, in most major projects, LOAEL and SOAEL values have been adopted using absolute values of indices.</p> <p>Rather than absolute levels (from which the acceptability of an environment can be understood), an EIA is concerned principally with changes or impacts. In the environmental impact assessment context, the assessment of noise and vibration effects</p>	
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				<p>has traditionally followed the approach adopted in many areas of environmental impact assessment in which first of all the baseline is considered, and then the effect of the proposal in the context of the baseline is evaluated. The outcome is a finding of change.</p> <p>An example of this is the case of road traffic noise and the procedure set out in DMRB LA111. The process of carrying out a significance assessment as part of an environmental impact assessment is not testing compliance with planning policy on the effect on the health and quality of life of individuals.</p> <p>For all these reasons, the criteria employed in the two processes can be different. The Thames Tideway Tunnel and Heathrow Cranford decisions expressly endorsed this approach. Crucially, the policy formulation at issue in both cases was the same as in the</p>	
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				<p>present case. In all three cases, the policy derives ultimately from the NPSE which provides a common policy framework on this issue across the planning regime. The three aims of the NPSE are the same as the three aims set out at NPS EN-1 paragraph 5.11.9. For Thames Tideway Tunnel, the relevant policy was contained in the National Policy Statement for Waste Water, which at paragraph 4.9.9 adopts the NPSE policy of avoiding significant adverse effects on health and quality of life from noise and mitigating and minimising adverse effects on health and quality of life from noise. That is identical to the policy in paragraph 5.11.9 of NPS-EN1.</p> <p>The Examining Authority was explicit on this point, stating at paragraph 12.329: "On the first aim, the Applicant considers that the NPS relates to significant observed</p>	
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				<p>adverse effects as defined by NPPG and NPSE and not the definition of significant effect in the ES. We agree with this distinction.”³⁵</p> <p>The Heathrow Cranford decision was concerned with noise policy in the NPSE. As has been stated above, that policy is identical to that in NPS EN-1 at paragraph 5.11.9, which is relevant in the present case. For that reason, the fact that it was a s.78 appeal decision rather than a NSIP does not affect the support which it lends to SZC Co.’s approach to the policy. At paragraph 1064, the Heathrow Cranford Inspector confirmed:</p> <p><i>“I do not equate the “significant adverse effects” identified in the ES with those that the NPSE seeks to avoid.”</i></p> <p>SZC’s approach is also consistent with the approach in legislation to addressing noise</p>	
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				<p>impacts through insulation. The Noise Insulation Regulations 1975³⁶ and the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996³⁷ specify an absolute level of noise at which a duty to insulate arises, rather than operating by reference to the measure of change as seen in the EIA context.</p> <p>Further confirmation of the correct approach is also found in the updated noise assessment guidance in the Design Manual for Roads and Bridges (DMRB), which was issued in November 2019 in LA111 (updated in May 2020). LA111 separates SOAEL from significance in the EIA context. LA111 sets LOAELs and SOAELs for noise and vibration (e.g. Table 3.49.1). It does not align either with EIA significance. They are treated as different concepts. LA111 treats the SOAEL as a level of noise, whereas in LA111 EIA significance generally</p>	
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				<p>relates to a change in noise level. It allows for an outcome below SOAEL to be significant, in terms of the EIA Regulations. A receptor may experience a large (significant) increase in noise but if that increase comes from a low base, it may not reach a level which would justify noise insulation. LA111 expressly provides that the LOAELs and SOAELs which it identifies are to apply for the purposes of the policy test in the NPS for National Networks, i.e. to avoid significant adverse impacts on health and quality of life and to mitigate and minimise other adverse impacts on health and quality of life (England National Application Annex to LA111, E/1.3 and Table E/1.3). That is the same policy found in the NPSE and in NPS EN-1 at paragraph 5.11.9.</p> <p>LA111 is up to date guidance from the relevant national authorities. It should carry</p>	
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				<p>weight. The approach set out in LA111 accords with the planning decisions at Heathrow Cranford and Thames Tideway Tunnel. The policy regimes applicable for each (NPSE for Cranford, NPS for Waste Water for Thames Tideway Tunnel, and NPS for National Networks for road schemes and LA111) all incorporate the tests from the NPSE and are materially identical to that applicable in the present case, i.e. NPS EN-1 paragraph 5.11.9.</p> <p>(ii) Relevant extracts of Thames Tideway Tunnel are provided in Appendix 21A to this chapter and relevant extracts of Heathrow are provided in Appendix 21B to this chapter. The relevant passages are referred to in the answer to (i) above.</p> <p>(iii) The Thames Tideway Tunnel and Heathrow Cranford decisions are directly relevant because they were dealing with same policy framework</p>	
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				from the NPSE which is applicable in the present case. Please see answer to (i) above. (iv) No response from SZC Co. is required.	
NV.1.80	The Applicant, ESC	Residential Amenity In the respective chapters of the ES there are various locations which recognise that noise levels would exceed the SOAEL or be above the LOAEL. In each location the internal environment of residential receptors has been sought to be protected by mitigation when the appropriate threshold is exceeded. (i) In the locations where the SOAEL is exceeded in a residential garden how can this be	(I) If the SOAEL is exceeded in a residential garden, then this would not meet the aim of the NPSE in avoiding significant adverse effects on health and quality of life from noise. (ii) The LOAEL and SOAEL values that are adopted should ideally represent a balance of potential internal and external effects, although this is not possible in all cases. In any case, this reinforces the statement in NPS EN-1 that “it may be appropriate for the Planning Inspectorate to consider requiring noise mitigation through improved sound insulation to dwellings” but only in situations “when all other forms of noise mitigation have been exhausted”. ESC considers	(i) The SOAEL values for construction noise were derived from the guidance contained in BS5228-1: 2009+A1: 2014 ³⁸ , which is appropriate for noise-sensitive premises, including gardens. The important SOAEL value for trains relates to sleep disturbance, which is an internal effect, and applies at a time when gardens are unlikely to be in use (i.e. at night). The other rail SOAEL values, and the SOAEL values for road traffic noise, are derived from the relevant Noise Insulation Regulations ^{39, 40} , which relate to the internal environment. SZC Co. has only sought to protect the internal environment where the relevant effect occurs within the property, or where legislation or guidance suggests that is the	(i) The Applicant states in their response that “The SOAEL values for construction noise were derived from the guidance contained in BS5228-1: 2009+A1: 2014 ³⁸ , which is appropriate for noise-sensitive premises, including gardens.” While the overarching guidance may be appropriate for residential receptors (including gardens), the figures from BS5228-1 adopted as construction SOAEL values specifically relate to the provision of insulation to control internal noise levels where “all reasonable measures have been taken to reduce the noise levels, but levels are still such that widespread community disturbance or interference with activities or sleep is likely to occur”. ESC would reiterate our previous comments at D2 and specifically the reference to 5228-1 Annex 5E for long-term construction projects involving “large scale and long-term earth moving activities” which the proposed development would certainly be. The Applicant’s other comments are noted. (ii) The Applicant states that “The values for the main development site are lower than the values that would flow from BS5228-1: 2009+A1: 2014, in recognition of the duration and work hours for the site.” However, significance thresholds for

		<p>said to meet the aims of the Noise Policy Statement for England in avoiding significant adverse impacts on health and quality of life from environmental ...noise?</p> <p>(ii) In light of the length of the construction period for the main development site what noise level would be regarded as appropriate and what mitigation is offered to protect residential gardens to ensure this level is not breached?</p>	<p>that all possible forms of mitigation should be exhausted to reduce noise levels before they reach a receptor, so that adverse effects on external amenity are mitigated, not just on internal health/amenity. The SOAEL values for construction noise are based on those suggested in Table E2/Annex E4 of BS 5228-1+A1:2014 as thresholds for construction noise mitigation and are therefore based on assessing and mitigating internal impacts only. There is guidance in Annex E5 of BS 5228 which specifically relates to long-term construction projects involving “large scale and long-term earth moving activities” and provides recommended noise limits for this. ESC consider that this approach is more directly suitable than an approach based on noise insulation thresholds, and that it would provide the</p>	<p>appropriate course of action; examples would include the Noise Insulation Regulations for road and railways^{41, 42} and Part 1 of British Standard 5228⁴³, which relates to construction noise. SZC Co. likewise has protected external areas where legislation or guidance suggests that is the appropriate course of action.</p> <p>(ii) The medium magnitude of impact values identified in Table 11.2 in Volume 2, Chapter 11 of the ES [APP-202] correlate with a significant effect, in an EIA context, for a medium sensitivity receptor, i.e. a dwelling. These values are included in the Code of Construction Practice (Doc Ref. 8.11(B)) as the thresholds that the works must be managed against. By placing controls on noise generation at source or between the source and receptor, as envisaged by the controls in the Code of Construction Practice, this</p>	<p>construction noise in the ES (e.g. medium impact, medium sensitivity receptor) are not lower at all times of day (0700-23:00). Annex E3 of BS 5288-1 (per the Applicant’s response) sets thresholds for day, evening, and night periods, with the applicable threshold for evening periods (19:00 to 23:00) set 5 dB below the 60 dB L_{AeqT} “Day” period adopted in the ES. Furthermore, Annex 5 of BS 5228-1 also recommends a threshold of 55 dB L_{AeqT} for daytime noise from long-term construction projects involving “large scale and long-term earth moving activities”.</p>
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			<p>necessary balance between external and internal noise effects. The 55 dB L_{Aeq,1h} absolute noise limit recommended in that annex is also broadly aligned with WHO thresholds for ambient noise in external amenity areas from the Guidelines for Community Noise, 1999 (50-55 dB L_{Aeq,T}).</p> <p>Alternatively, the ABC Method, per Table E1/Annex E3 of BS 5228 also provides suitable (albeit less onerous) criteria for assessing the impact of external construction noise.</p>	<p>mitigation will protect residential gardens. The values for the main development site are lower than the values that would flow from BS5228-1: 2009+A1: 2014⁴⁴, in recognition of the duration and work hours for the site. These are considered to be the appropriate values, and the monitoring and management processes to be set out in the Noise Monitoring and Management Plans will be the key mechanism for achieving these values.</p>	
NV.1.93	The Applicant, ESC (Part ii) only)	<p>Night-time Rail Noise</p> <p>Campsea Ashe Parish Council, Woodbridge Town Council and ESC all express concern that the assessment of effects from the night-time rail operation as proposed has not</p>	<p>(ii) ESC does not agree with their concerns on the assessment methodology, ESC considers the effects have been adequately assessed (in terms of methodology/criteria).</p> <p>ESC does agree that those identified effects would not be properly mitigated, based on current proposals.</p>	<p>(i) The Relevant Representations were made on the basis of the assessment set out in Volume 9, Chapter 4 of the ES [APP-545], which has been superseded by the updated assessment set out in Volume 3, Chapter 9 of the ES Addendum [AS-188] and the associated Appendices 9.3.A to 9.3.E [AS-257] and [AS-258].</p>	The Applicant's response is noted. ESC reiterate our previous response at D2 regarding the current draft RNMS and NMS, which ESC are discussing further with the Applicant.

		<p>been adequately assessed or those effects on residents properly mitigated.</p> <p>(i) Please respond to the concerns and set out how the assessment has been undertaken and how the mitigation offered would work in practice.</p> <p>(ii) Do the Council agree with these concerns?</p>	<p>The Applicant has provided a draft Rail Noise Mitigation Strategy and a Noise Mitigation Scheme, we are not currently satisfied with these and are discussing further with the Applicant.</p>	<p>The updated assessment explains that overly-conservative assumptions were made in the main ES, provides much more detailed assessment and sets out the mitigation measures that will be taken to avoid significant observed adverse effects.</p> <p>The mitigation that applies to operation of trains, and train infrastructure, is set out in the draft Rail Noise Mitigation Strategy [AS-258], which is to be secured by Requirement 25 in the draft DCO (Doc Ref. 3.1(C)).</p> <p>The Noise Mitigation Scheme (the original version of which was set out in Volume 2, Appendix 11H of the ES [APP-210] with a revised version provided as Doc Ref. 6.3 11H(A)), is to be secured via Schedule 12 of the draft Deed of Obligation (Doc Ref. 8.17(C)).</p> <p>(ii) No response from SZC Co. is required.</p>	
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R.1 Radiological Considerations					
R.1.29	ONR, ESC, EA, The Applicant	<p>Public Health PHE have indicated a series of shortcomings in their RR with regard to both radiological and air quality issues – please respond to each of the points that they have raised in so far as it relates to your responsibilities and explain whether you consider these issues could be overcome. In the event you consider the issues can be resolved please explain how the matters would be resolved and under which regime appropriate mitigation would be secured and</p>	<p>Air quality – refer to detailed response re: particulate matters and dust deposition, along with general air quality comments at AQ.1.2, AQ.1.3, AQ.1.7, AQ.1.11, and AQ.1.22.</p>	<p>Responses to the comments raised by Public Health England in their relevant representation are included within the Statement of Common Ground with Public Health England (Doc Ref. 9.10.22). A summary of the responses to radiological and air quality comments is provided below for ease of reference.</p> <p>Air Quality Impacts The judgement placed on defining health significance was one of professional opinion, underpinned by the evidence provided in the ES, and reinforced though a precautionary approach where all residential receptors are considered sensitive, despite the baseline indicating the contrary. With reference to air quality, following a review of the air quality assessment outputs, the relative change in concentration and exposure</p>	<p>ESC does not necessarily agree with all the statements made in the Applicant’s response, but does agree that the impacts of the proposed development, following mitigation, are sufficiently low as to not give rise to any significant adverse effects on public health.</p>

		operation monitored.		<p>for NO₂, PM₁₀ and PM_{2.5} at all receptors are orders of magnitude lower than is required for any quantitative exposure response assessment, from any construction and operational activity (including at the main development site, from transport beyond the site, at all associated developments and from the combined heat and power facility). As detailed in paragraph 28.6.146 of Volume 2, Chapter 28 (Human Health and Wellbeing) of the ES [APP-346] from a health context, the only significant operational emission was from the periodic testing of the emergency backup generators. However, even here, the change in concentration and exposure is orders of magnitude lower than is required to quantify any manifest health outcome. This risk was set into context through a</p>	
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				<p>hypothetical assessment which demonstrated that even if a quarter of the population within East Suffolk would reside at the location with the maximum change in emission concentration for an entire year, there would still be no health impact.</p> <p>These findings set the basis to the professional judgement on significance, where all air quality objectives protective of the environment and health are met, and the relative change in concentration and exposure are insufficient to quantify any manifest health outcome (be it adverse or beneficial) forming a very low impact.</p> <p>When applied alongside the inherently precautionary approach where it is assumed that the entire population within the study area are of uniformly high sensitivity to</p>	
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				<p>changes in air quality, the effect is still negligible (not significant).</p> <p>The change in construction exposure of non threshold emissions, such as NO₂, PM₁₀ and PM_{2.5} at any receptor modelled is orders of magnitude lower than is required to quantify any manifest health outcome (be it adverse or beneficial). Sensitivity analysis is not required, and best demonstrated through the hypothetical assessment of risk for the LOOP backup generator emissions. Even when grossly overestimating population exposure (where it is assumed a quarter of East Suffolk live outside for an entire year in the highest process contribution), the relative change is still insufficient to result in an measurable health outcome. The proposed development does not materially impact upon air quality</p>	
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				<p>standards protective of health, and the relative change in concentration exposure remain orders of magnitude lower than is required to quantify any manifest health outcome. Sensitivity analysis is not required.</p> <p>Sensitivity testing was undertaken of the methods used to estimate future year emissions from road transport at the Stratford St Andrew Air Quality Management Area to confirm the assumptions on future vehicle emission rates used in the assessment. The methodology and sensitivity test is reported in Volume 3, Appendix 2.7.A of the ES Addendum[AS-127]. Emissions permitted under other regulatory regimes have been considered as part of the baseline modelling to which emissions from the proposed development have been added.</p>	
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				<p>Cumulative assessment with other projects that do not form part of the baseline assessment is presented within Volume 10, Chapter 4 of the ES [APP-578].</p> <p>Fetal doses related to the fishing family are also considered in the Human RIA but are not discussed in Para 25.6.21 - It needs to be clear from which site and discharge route (aqueous, gaseous or both) the doses relate to.</p> <p>The Radiological Considerations Chapter (Volume 2, Chapter 25 of the ES [APP-340]) provides a summary of the results from the Human Radiological Impact Assessment, and as such not all results are included. A copy of the full radiological impact assessment is included within Volume 2, Appendix 25B of the ES [APP-371]. This ensures that the reader can have access to both a summary and the full assessment.</p>	
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				<p>Fetal doses were only assessed in terms of a Screening Assessment and as such was not included as part of the main summary. The results of the Screening Assessment showed that the dose to a foetus from discharges of Aqueous and Gaseous Effluent from Sizewell C would be 17 $\mu\text{Sv}/\text{year}$. This constitutes less than 6% of the statutory (source and site) dose constraints of 300 and 500 $\mu\text{Sv}/\text{year}$ and is considered to be low.</p> <p>Para 25.6.47 states exposure from natural sources as 2700 microSv, but this includes medical radiation therefore is not correct. Vol 2 Chpt 25 App 25A-25C Para 1.1.12 states 2.7mSv as well.</p> <p>This is a typographical error and should have read <i>"...(0.4% of) the amount of radiation exposure from background sources in the UK (2700 $\mu\text{Sv yr}^{-1}$)....'</i></p>	
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				<p>In terms of paragraph 1.1.12 of Volume 2, Appendix 25A° of the ES [APP-341], Background Dose is defined by the International Atomic Energy Agency as ‘Dose or dose rate (or an observed measure related to the dose or dose rate) attributable to all sources other than the one(s) specified’⁵⁰. As defined by Public Health England, in the UK the average exposure to member of the public in UK is 2700 µSv/year⁵¹. As such the statement is correct.</p> <p>Para 1.1.12 states RSR is delivered by EA on behalf of DECC...needs updating</p> <p>Noted this is now Department for Business, Energy and Industrial Strategy.</p> <p>App 25B Human RIA Para 30 should say "The different modules within PC-CREAM 08 model the contribution of radioactive decay chain products (‘progeny’) in</p>	
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				<p>slightly different ways. For the FARMLAND and RESUS modules only the first progeny that is not in secular equilibrium over a period of one year is modelled explicitly. In PLUME the first progeny, even if it is short-lived, is modelled explicitly so its contribution to dose at short distances downwind can be determined. DORIS considers all radionuclides in the decay chain and progeny that are not in equilibrium with the immediate parent are modelled explicitly [Ref 29]"</p> <p>We note the comment raised by Public Health England. Both the original and revised statement are equivalent.</p> <p>Table 2-4 Footnote 7 reference needs to be checked</p> <p>This is a typographical error and should have read Reference 29.</p> <p>Para 124 – this paragraph discusses skyshine but does not reach a conclusion</p>	
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				<p>about whether the conclusions of the sensitivity analysis should be applied.</p> <p>This is discussed further in Paragraphs 145-147 and Table 3-2 of Volume 2, Appendix 25B of the ES [APP-371]. It should be noted that the low level of radiation dose to the public from Sizewell C is dominated by Gaseous and Aqueous Discharges, and Skyshine and Direct Dose.</p> <p>Would it not be more appropriate to refer to the skin dose limit given in EPR 2016 Schedule 23 Part 4 (1) Para 2 (a)?</p> <p>Schedule 23 Part 4(1) Paragraph 2 (a) refers out to the Basic Safety Standards Directive.</p> <p>In the UK the Dose Limits specified in the Basic Safety Standards Directive are enshrined in domestic legislation via the Ionising Radiations Regulations 2017. As such the statement is correct.</p>	
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				<p>Given importance of marine food pathway, has volumetric exchange rates been considered within the RIA?</p> <p>The sensitivity analyses were undertaken in line with joint guidance from the Environment Agency, Scottish Environment Protection Agency, Northern Ireland Environment Agency, Health Protection Agency and Food Standards Agency on "Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment"⁵². This identified the three specific areas noted in the comments.</p> <p>Although this does not explicitly consider the marine dispersion, the following text is provided in paragraph 34 of Volume 2, Appendix 25B of the ES [APP-371] in relation to the conservatism used in the volumetric exchange rates. This is summarised below.</p>	
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				<p>All marine dispersion parameters <i>'are the PC-CREAM default values, except for the volume of the local compartment, which has been increased from 3.00E+08 m3 to 4.00E+08 m3 to ensure that the discharge point (roughly 3.5 km from the coast) is within the local compartment. Sediment distribution coefficients and all properties of the other ocean compartments modelled within PC-CREAM were also default values. The default volumetric exchange rate corresponds to a local compartment volume of 3.00E+08 m3. This has been retained as a new volumetric exchange rate cannot be derived without hydrographical data relevant to the area [Ref 29]. A local compartment of 4.00E+08 m3 would have a higher exchange rate, which would result in lower doses, so it is conservative to retain the default value [Ref 17]. The change in volume is small compared</i></p>	
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				<i>to the volume of the regional compartment, so the impact on the regional compartment is expected to be small'.</i>	
SE.1 SOCIO-ECONOMIC					
TT.1 Traffic and Transport					
W.1 Waste (conventional) and material resource NO					
QUESTIONS FOR COUNCIL					