

The Sizewell C Project

9.126 SZC Co. Response to Request for Further Information at Deadline 10 (6 October 2021)

Revision: 1.0

Applicable Regulation: Regulation 5(2)(q)

PINS Reference Number: EN010012

October 2021

Planning Act 2008 Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





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1 INTRODUCTION

1.1.1 On 6 October 2021, the Examining Authority published a **Rule 17 Letter: Request for further information** [PD-052]. **Section 2** of this note responds to those questions which were addressed to the Applicant. **Section 3** of this note provides SZC Co. comments on the draft Requirement 8(3).

2 RESPONSE TO REQUEST FOR FURTHER INFORMATION

Table 2.1: SZC Co Response to ExA's Request for Further Information

SZC Co. Response
The MMO only referred to the Disposal Site Coordinates lying partly outside of the overall development. The Applicant concurs this is the case. On the DML, coordinates are provided within which the licensed activities must take place and, for the purposes of the Sizewell C project, the overall development boundary (the "redline boundary") was used to define this area. However, the overall development boundary tends to follow the outline of the works themselves and this cannot be followed easily by a vessel when navigating. Therefore, the coordinates for the disposal site enclose a simple



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	square with boundaries following lines of latitude and longitude such that the vessel master can navigate within the boundary more easily. To enable these coordinates to form a simple square, some parts lie partly outside the overall development boundary.
	Although it is acceptable for the disposal site to lay partly outside of the overall development boundary, it was at conflict with the drafting of Condition 7 on the DML in the dDCO (Doc Ref. 3.1(j)) which stated that ALL licensed activities must take place within the coordinates of Table 1 (the overall development boundary coordinates). Condition 7 has been redrafted to allow for disposal activities to take place with the disposal coordinates as provided in Table 10 of the DML:
	"The licensed activities must be carried in either the area bounded by the coordinates set out in Part 4 (Table 1) or, in relation to the disposal of capital dredge material and drill arisings (pursuant to condition 4(2)(p)) only, in the area bounded by the coordinates set out in Part 4 (Table 10), each



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	defined in accordance with reference system World Geodetic System 1984 (WGS84)."
Questions on the DCO and related documents	
4 How are the marine works forming part of the temporary desalination plant and intakes / outfall covered by Req 8 and the CMS? Req 8 only applies to Work No 1 and that does not include marine works – see reply to ExQ DCO.1.20 which said "i) The Applicant has for clarity updated the definition of 'main development site' so as to specify each of the Work Nos comprised in the definition and the related Works Plans. The definition now reads, 'the land within which Work Nos. 1A, 1B, 1C, 1D and 1E may be constructed as shown on Works Plans on sheet nos. 1-5 and 7-8'. This definition comprises all onshore elements of the main development site. The offshore elements (Work Nos 2A-2L) also form part of the main development site but are not included in this definition as they are separately listed as licensable activities within the Deemed Marine Licence in Part 2 of Schedule 20 to the draft DCO (Doc Ref. 3.1(C)). Certain elements are both onshore and offshore (e.g. the permanent beach landing facility) and are therefore listed under Work No 1A and as a licensable activity in Schedule 20".	Requirement 8 has been amended to refer to the 'authorised development'. This ensures that the requirement applies to the relevant works in question. The marine works are secured by the Deemed Marine Licence and the DML conditions set out in Schedule 20 to the draft DCO (Doc Ref. 3.1(J)).
5 How are the temporary desalination plant intake and outfall tunnels and the intake head shaft and the outfall head, outfall shaft and diffusers covered by the CMS? Despite the wording of the CMS purporting to cover them they are not part of Work No.1 and Req 8 only applies the CMS to Work No.1.	As above.



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6 The ExA notes that the CMS is applied to Work No 1 by Req 8(1). However, the CMS is stated on its face to apply to the main development site - see the title and para 1.1.1. The document covers not only the main platform but also four other components — (i) SZB relocated facilities and National Grid land, (ii) Offshore Works area, (iii) Temporary construction area, (iv) LEEIE, and in addition construction activities for the marsh harrier habitat improvement area at Westleton (if to be provided), the Fen meadow compensation sites and the Leiston off-site sports facilities.	As above.
The offshore works are not in Work No 1. The DCO does not define the temporary construction area. Nor does it refer to National Grid Land. Is that just the area needed for Work No 1A (d), (p), (q) and (s) and is it all of those or some? (They all contain transmission works.) How does the DCO apply the CMS to Works which it claims to cover which are not part of Work No.1? This is a point which may go beyond the	
desalination plant.	
7 The Protective Provisions with NW	These suggested amendments have been made to the final version of the protective provisions for
Para 7, there is no such thing as the "Department for Rural Affairs and Agriculture". The department in question is the "Department for	Northumbrian Water Limited within Schedule 18 to the dDCO (Doc Ref. 3.1(J)). This is also reflected in



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Environment, Food and Rural Affairs". Please will the Applicant and NW amend the draft DCO accordingly.	the final SoCG with NWL submitted at Deadline 10 (Doc Ref. 9.10.2(B))
The ExA suggests the Applicant and NW consider this following wording for para 6 "Following satisfaction of paragraph (5), [the Secretary of State for]/[the Department for] Environment, Food and Rural Affairs has granted permission for the publication of ESW's final WRMP24". It is the ExA's understanding that in relation to the process in para 6, the final step would be the publication of the final plan by the undertaker, which can only happen with the permission of the SoS. In outline they understand the undertaker prepares a draft plan, consults, there can be an inquiry if the SoS thinks that is necessary, the SoS can direct changes if they are considered necessary, and the end result is that the undertaker prepares a final version of the water resources management plan and publishes it with the permission of the SoS.	
8 The Compliance & Confirmation Document	(a) The relevant searches of the public records to verify the solvency of the Applicant and which were
The ExA thanks the Applicant for the draft of the legal opinion on due execution of the DoO to be provided by Herbert Smith Freehills.	undertaken prior to execution are set out in paragraphs 3.1.6 and 3.1.7 of the Confirmation and Compliance Document (Doc Ref. 8.22).
(a) The ExA refers the Applicant to [PD-009] Annex B para 27.	
The Northampton Gateway Rail Freight Interchange document contained the following:	Please see the updated paragraph 3.2.6 which employs the quoted text from the Northampton Gateway Rail Freight Interchange document setting out the assumptions in respect of solvency, which



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ExA Comment

3.4 A search of the public records on the date of this document before execution of the S106 revealed no evidence of any resolutions for the winding up or dissolution of the Applicant company and no evidence of the appointment of any liquidator, administrator or other person, insolvency or event which would deprive the Applicant of any of its assets or of the power and ability to enter into the S106 and perform its obligations thereunder.

The SZC equivalent contains no equivalent. In fact para 3.2.5 expressly assumes solvency without enquiry. Please will the Applicant ensure adequate solvency checks are undertaken and record the result which it is hoped will be no less than that at Northampton Gateway which the ExA referred to in [PD-009] Annex B para 27 from which the above quotation is taken.

(b) The draft legal opinion contains the following statement at para 3.2.7:

"Validity/enforceable obligations: although we consider that obligations of the Applicant under the Deed of Obligation constitute legal, valid, binding and enforceable obligations, it is not certain that those obligations will necessarily be legal, valid or binding or will be enforced in all circumstances in accordance with their terms, since the existence, effect and enforcement of legal obligations is subject to principles of law, equity, court's discretion, issues of public policy and procedure of general application."

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clarifies that searches have been undertaken to verify that no evidence is available of insolvency and that the assumption is that all relevant evidence in this respect is revealed by these searches.

(b) Although the Applicant and its advisers are not aware of any reason why the obligations should not be enforceable, now or in the future, there are circumstances which could arise such that an obligation was not enforced.

As accepted by the Examining Authority, this would include the courts exercising their discretion. Other issues of fact which could arise and prevent enforcement in the future include the time-barring of claims, set off, or waivers. Further, whilst no issues of public policy are anticipated, as in any case it is always possible that public policy considerations may change in the future in a way that militates against enforcement. Although, as set out in the **Deed of Obligation Explanatory Memorandum** (Doc Ref. 8.20(F)), the Applicant and its advisers are satisfied that the obligations are sufficiently certain and fair as to be enforceable, the



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ExA Comment

The ExA is surprised by this. The matters stated in the caveat (from the words "it is not certain" onwards) are ones which the ExA expects the Applicant and its advisers, and also those advising the Councils to have taken into account in drafting the agreement. The ExA can see a case for adverting to the court's discretion, but otherwise considers the rest of the caveat to be inappropriate; they ask for it to be removed. The Secretary of State will be expecting a fully enforceable agreement to be presented.

- (c) The legal opinion at Northampton Gateway contained assurances that
- 1.1.3 all those necessary to be party to the S106 so that the obligations contained therein are complied with throughout the construction and use of the development have been made parties to the document and are party to the S106; and
- 1.1.4 the construction, occupation and use of the development is restricted by the S106 obligations and non-compliance with those obligations would be enforceable.

Whilst the agreement at SZC is obviously not, for reasons explored during the examination, a s.106 agreement, assurance of its efficacy in securing the matters contained within it is important, especially given the innovative nature of the agreement and creative legal thinking which has been brought to bear upon it. In addition, the "running" of the agreement under Article 9 of the DCO is restricted so that it only runs with undertakers to

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enforcement of each obligation would depend upon the interpretation of the courts.

Please see the amended paragraph 3.2.8 which sets out the various circumstances in which it is considered that enforcement may be compromised.

The caveats are standard to all HSF legal opinions on contracts, and our Opinions Committee is not able to provide an opinion without these caveats as they are simply a factual list of the circumstances which could mean a contract is unenforceable.

- (c) Please see the amendments to paragraph 2 of the **Confirmation and Compliance Document** (Doc Ref. 8.22) which confirms that:
 - the obligations are legal, valid, binding, and enforceable;
 - will remain binding and enforceable upon SZC Co until it parts with the entirety of its benefit under the Development Consent Order; and
 - will run with the powers to construct operate Work No. 1A (a) – (h).



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whom the powers to construct operate Work No. 1A (a) – (h) have been transferred or granted. Accordingly, the ExA asks the Applicant to procure clear legal opinion as at paragraphs 1.1.3 and 1.1.4 of the Northampton Gateway opinion applied mutatis mutandis to Sizewell C.	Please also see the updated Deed of Obligation Explanatory Memorandum (Doc Ref. 9.20(F)) in respect of the requested confirmations of the Applicant and the Applicant's legal adviser's views in respect of the parties to the Deed of Obligation
(d) Paragraph 4.1 of the draft legal opinion imposes restrictions on the disclosure of the legal opinion.	and its running with the undertaking. (d) Please see the updated paragraph 4 of the
The opinion will be a public document once submitted to the examination and must be entered in the Examination Library. It will be referred to in the ExA's recommendation report and may also be referred to in the SofS's decision. These are also public documents.	Confirmation and Compliance Document (Doc Ref. 8.22).
The restrictions on disclosure are accordingly inappropriate and will be confusing. The ExA asks that they be removed.	
The ExA also reminds the Applicant that there are very limited circumstances in which disclosure of material is restricted in a DCO application, namely matters of defence or national security where disclosure would be contrary to the national interest (PA 2008 s. 95A). Those circumstances clearly do not apply to the legal opinion.	
9 A similar legal opinion to that for the DoO should be submitted for the legal agreement with the Environment Agency referred to in their Deadline 9 submission dated 24 September any other legal agreements being submitted to the Examination.	Please see the updated Confirmation and Compliance Document (Doc Ref. 8.22) which also applies to the agreement with the Environment Agency.



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10 The ExA has not seen a similar legal opinion to [REP5-018] at Northampton Gateway. The ExA asked for this also in [PD-009] (same para). Please will the Applicant submit such a document at D10.	The Applicant notes that the final signed legal opinion provided at Northampton Gateway [REP6-048] superseded the draft submitted under reference [REP5-018]. Therefore, no opinion was given at Northampton Gateway in respect of compliance with the criteria in paragraph 4.10 of the NPSNN Tests (set out in section 3 of [REP5-018] and omitted in [REP6-048]).¹ The omission of this confirmation is considered particularly appropriate given that the issue of whether the policy criteria are met is a matter of judgment rather than law (save where they overlap with the Newbury criteria). Therefore, whilst the Applicant and its advisers may give a view and set out the basis of their view, this will be a matter for the Secretary of State to determine. Please see section 3 of the Deed of Obligation Explanatory Memorandum (Doc Ref. 9.20(F)) for further details of the relevant legal and policy tests.

¹ Examination library references to the Northampton Gateway <u>Examination Library</u>



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ExA Comment	SZC Co. Response
	Please see the Deed of Obligation Explanatory Memorandum (Doc Ref. 9.20(F)) which sets out the Applicant and its adviser's view on compliance with the relevant tests.
11 Please will the Applicant submit at D10 a track change version of the DCO comparing the final version with the version as originally submitted. Question arising from the Applicant's response to ExQ3	This is submitted as part of the DCO package under document reference 3.1(J).
13 The Applicant has not answered the second part of ExQ. DCO.3.1 "Is it inevitable that works to be carried out in general accordance with details etc will, if they are simply consistent with those details etc not give rise to materially new / different effects?" Please will the Applicant remedy this.	The Schedule 2 of the dDCO (Doc Ref. 3.1(j)) requirements have been updated so that there are no instances where works would be carried out 'in general accordance' with submitted details. All references have now been amended so that they state 'in accordance' with. The term 'general accordance' is now only used in respect of requirements that relate to subsequent approvals.
Question in relation to the Fourth Addendum to the ES	
14 The Fourth Addendum to the ES, para 3.9.117 draws conclusions on sensitivity in a section on magnitude. The following section is headed "sensitivity". Please will the Applicant explain the relevance of sensitivity to the assessment of magnitude in this section.	[This paragraph was included in error and can be disregarded.] The sensitivity assessment is, as the ExA correctly
	identified, in the follow sections paragraphs 3.9.119-3.9.123 of the fourth ES Addendum [REP7-029].
Questions arising from ISH15	
15 Can the applicant provide more detailed explanation of why it considers there is no need for further detailed assessment for Minsmere despite the	A revision of the Sizewell C Desalination Plant Air Impact Assessment [REP9-026] is submitted at



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annual PC/CL for ammonia being over the 1% threshold (1.6% in Table 3-4) and the annual PC/CL for NOx being over the 1% threshold (4.3% in Table 3-1)? Para 3.4.3 gives an explanation but in using rudimentary maths rounding to the nearest whole number makes Ammonia 2% not 1%.	Deadline 10 (Doc Ref. 9.117(A)), which addresses this question.
16 Should the Desalination Plant Air Impact Assessment be taken as applicable to both the ES and HRA? How have cumulative and in combination effects been considered?	A revision of the Sizewell C Desalination Plant Air Impact Assessment [REP9-026] is submitted at Deadline 10 (Doc Ref. 9.117(A)), which addresses this question. This addresses both the ES and HRA tests and demonstrates that there is no good reason to consider that a permit would not be granted for the generators. Further detailed assessment will be provided by SZC Co. and considered by the Environment Agency as part of the permit application.
17 Can the Applicant explain why increased NOx and ammonia emissions to Minsmere would not undermine the conservation objectives for the Minsmere to Walberswick Heaths and Marshes SAC and Minsmere-Walberswick SPA?	A revision of the Sizewell C Desalination Plant Air Impact Assessment [REP9-026] is submitted at Deadline 10 10 (Doc Ref. 9.117(A)), which addresses this question
19 The Shadow HRA Third Addendum only assesses the desalination plant and does not include information regarding the proposed water supply by tankers prior to its installation. Notwithstanding the confirmation provided by the Applicant at ISH15, and in REP8-045, that the HGV movements are included within the 'cap', for the avoidance of doubt could the Applicant identify the documents	The description of the construction and operation of the desalination plant is included within the Construction Method Statement (Doc Ref. 10.3), including that potable water will be imported by road via water tanker truck during the first 9-12 months of Sizewell C construction. The number of tanker deliveries is expected to rise gradually during this



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containing this information to inform the HRA/an appropriate assessment, where required".	period to 40 deliveries per day (80 two-way tanker movements) and will be within the early years Heavy Duty Vehicle (HDV) limits secured in the Construction Traffic Management Plan (CTMP) (Annex K of the Deed of Obligation (Doc Ref. 10.4).
20 The following questions were posed at ISH15 agenda items 3 and 4 to the government advisers and RSPB. The Environment Agency and RSPB were present and gave their responses. Please will Natural England and the MMO respond in writing. The ExA appreciates that the primary focus of the MMO is marine and that it may not have a view on all the questions. (a) Item 3(b) In relation particularly to terrestrial ecology, are there any submissions you wish to make as to the assessment for HRA of additional HGV movements? If so, what is the problem and what do you want to see? Are you satisfied with the HRA assessment of these matters? For completeness, please address this issue for nationally designated sites as well. Does the HRA assessment properly address the HGV movements arising from Change 19? (b) Item 3(c) Are there any submissions you wish to make as to the assessment for HRA of noise and vibration? So please include disturbance effects. (Natural England's and the MMO's attention is drawn to the Applicant's oral comments on the use of the word "disturbance" during ISH15 at Agenda item 3(a)). Please include disturbance effects on bird, marine mammal and fish qualifying features of relevant internationally	 The relevant final SoCGs have been submitted: SoCG with Natural England (Doc Ref. 9.10.7(B)). SoCG with RSPB/SWT (Doc Ref. 9.10.24(B)) SoCG with the Environment Agency (Doc Ref. 9.10.4(B)) SoCG with the MMO (Doc Ref. 9.18(C)) SZC Co. has submitted its Comments on the RIES Report (Doc Ref. 9.119) which includes the engagement on HRA matters with the statutory stakeholders and the status of agreement. Though these queries are addressed to Natural England and the MMO, SZC Co. makes the following comments.



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and nationally designated sites. What is / are the problem / problems you identify and what do you want to see? (c) Item 3(d) Are there any submissions you wish to make as to the assessment for HRA of the air quality effects of additional on-site diesel generators and of additional HGV movements? If so, what is the problem and what do you want to see? Are you satisfied with the HRA assessment of these matters? (d) Item 3(e) in relation particularly to marine ecology, are there any submissions you wish to make as to the assessment for HRA of the alterations to coastal processes and sediment transport arising from Change 19? If so, what is the problem and what do you want to see? Are you satisfied with the HRA assessment of these matters? And is there anything you want to say about effects of coastal processes and sediment transport on nationally designated sites (e) Item 3(h) The point is often made in the ES fourth addendum that the outfall is in same area as the FRR and that as that was assessed there are no additional issues for the desalination outfall construction, although the nature of what is discharged is different. But the FRR and the CDO would not operate together. The two headworks for the desalination plant will (a)	 (a) Please see the response to question 19 above with regards to HGV movements. In short, as the HGV movements fit within the number which have previously been assessed there is no change to the sHRA. (b) SZC Co. has provided a thorough assessment of the noise impact of Change 19. This is set out in section 3.5 in Volume 1 of the Fourth ES Addendum [REP7-030], electronic page 164] for the assessment on human receptors, and in SZC Co.'s Deadline 9 submission Response by SZC Co. to RSPB's Comments at Deadline 8 [REP9-024] for the assessment on ecological receptors. (c) A revision of the Sizewell C Desalination Plant Air Impact Assessment [REP9-026] is submitted at Deadline 10 to confirm no significant air quality effects occur from diesel
be constructed together but more importantly be operating at the same time as the CDO. So are the comparisons with the FRR alone	generators. This also considers combined effects with other site air emissions sources.
appropriate?	enects with other site an emissions sources.
(f) Item 3(h) Migratory fish have been screened out of the Third HRA	(d) In relation to HRA matters and coastal
Addendum at paragraphs 4.1.5 to 4.1.7, referencing an absence of	geomorphology, the most significant concern
potential effect pathways. However, these paragraphs also include	in relation to the HRA appears to be that of



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of the Shadow HRA third addendum we see that it is noted at Section 6 of the Shadow HRA Third Addendum that the Applicant states the reference	position to use the native grain size, no impacts on designated sites are expected.
populations used in the marine mammal assessments have been updated since the Shadow HRA Report [APP-145] and first Shadow HRA Addendum [AS-178] were prepared. These are outlined in Table 6.1 of the Shadow HRA Third Addendum and the marine mammal assessments in Section 9 "have been based on the updated reference populations, as well as the previous reference populations to allow a like-for-like comparison." Could the Applicant tell the ExA how their original HRA assessments for the Proposed Development as a whole would change if they used the updated reference population counts?	(e) An assessment of the discharges released from the CDO in-combination with the desalination intake and outfall is provided in ES Addendum Appendix 3A (Doc Ref. 6.18 (A)) and discussed within the Written Submissions Arising from ISH15 (Doc Ref. 9.122). The discharge concentrations do not overlap at ecologically relevant concentrations. Within the Written Submissions Arising from ISH15 (Doc Ref. 9.122) it has been confirmed that dredging for the installation of the CDO and the
	desalination intakes/outfalls early in the construction phase would not overlap temporally.
	(f) See Appendix A for the SZC Co's response to 20(f)
	(g) The Environmental Statement provides a full assessment of the impacts of water quality, including chlorination, on marine fauna [APP-311] and this is the subject of an application for a Water



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	Discharge Activity permit form the Environment Agency.
	SZC Co is not in agreement with Natural England (or the Environment Agency) on the methods used to convert juveniles to adults (Equivalent Adult Values) or the scale of the baseline with which potential impacts are compared. SZC Co has provided detailed responses on these issues (see Appendix F in [REP6-024]; [REP6-016]; [REP6-028] and Appendix I in [REP8-119]. SZC Co maintains that the methodologies for the fish assessments are appropriate and correct and that no impacts on designated sites will arise from cooling water abstraction. (h)-(k) No response required from SZC Co. (I) Further information has been provided within Appendix B of this document, comparing the previous assessments in the Shadow HRA Report [APP-145] and First Shadow HRA Addendum
	[AS-178] with updated assessments using the recently updated reference populations for grey seal
	from the Humber Estuary SAC, harbour porpoise from the Southern North Sea SAC and harbour seal
	from The Wash and North Norfolk Coast SAC.



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ExA Comment	SZC Co. Response
	The updated assessments do not change the outcomes and conclusions of the Shadow HRA Report [APP-145] and First Shadow HRA Addendum [AS-178].
21 Early Years Transport Clarification	Refer to Appendix C of this document for response.
 (a) The histogram in paragraph 1.9.2 [REP7-071] shows a smoothed HDV profile. It is not possible from this to ascertain any precise details. Provide an update to Figure 1 (The Early Years) of the Material Imports and Modal Split [REP5-114] that clearly annotates the smoothed HDV profile provided at Deadline 7. (b) Additionally, it is noted that in the latest version of the Implementation Plan / Phasing Schedule there are a number of activities, including the desalination plant construction that start in Year 0 and HDV flows in Year 0 should be included in the Early Years assessment. (c) Ensure that it is possible to read the numerical values on the histogram and it clearly identifies the following – (i) HGV by size as previously in Figure 1 [REP5-114]; (ii) Water tankers; and (iii) Buses 	
(d) To supplement this, provide a spreadsheet of the background data for the histogram of daily proportion by week, that shows the following – (i) HGV to the Main Development Site	



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(MDS), including the accommodation campus and the LEEIE; (ii) HGV for the Associated Development sites, this is assumed to be the Sizewell Link Road (SLR) (and the Two Village Bypass to/from stockpiles on MDS prior to completion of the rail bridge on the SLR – Please confirm this is a correct assumption and confirm the point on the histogram where the SLR haul road is available. (iii) The HGV numbers using the SLR as a haul road (iv) Both direct and park and ride bus services (v) Water tankers (vi) Assumed HGV flows for the Scottish Power application. (it is understood that this will not appear on the histogram and this is not included in the proposed cap level but is required to have an overall picture of the HDV movements for the cumulative assessment.	
Annex B Draft Requirement 8(3)	As requested by the ExA, SZC Co. has placed its comments on draft Requirement 8(3) as part of submissions clearly arising from ISH15. This is contained in Written Submissions Responding to Actions Arising from ISH15: Proposed Temporary Desalination Plant (5 October 2021) (Doc. Ref. 9.122).



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APPENDICES

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APPENDIX A: SZC CO. NOTE IN RESPONSE TO ITEM 20(F)



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1 MESH SCREEN AND APPROPRIATE ASSESSMENT

1.1 Introduction

- 1.1.1 During ISH 15 the ExA raised an issue as to whether the mesh screen which is part of the intake head for the desalination plant is an item of mitigation and therefore should not have been taken into account at the scoping stage for the purposes of the **sHRA Report Third Addendum** [REP7-279] (which had the effect of excluding consideration of European Sites with migratory fish qualifying features at the likely significant effect screening stage) and therefore the impact on migratory fish (4.1.4-4.1.7 [REP7-279]) ought to have been assessed. Reference was made in that context to the case of People over Wind v Coillte Teoranta (C-323/17) [2018] P.T.S.R.1668
- 1.1.2 The first part of this note expands on the oral answer given during ISH15 which was that the screen is an integral part of the design of the intake head and therefore there was no bar to taking it into account at the scoping or screening stage. That remains SZC Co's position, for the reasons set out below. Nevertheless, without prejudice to that position, and to provide additional comfort, SZC Co has reassessed the proposal on the basis that the mesh screen should not be taken into account at either the scoping or screening stage. The remainder of this document sets out that exercise. Part 2 sets out the new scoping exercise, Part 3 sets out the new screening exercise and Part 4 sets out the information for the appropriate assessment. Unsurprisingly, given the fact that migratory fish cannot pass into the intake head, the shadow appropriate assessment ultimately concludes that there will be no negative effect on migratory fish as a result of the desalination plant and therefore no risk of an adverse effect on the integrity of any European Site as a result of an impact on these qualifying features.

1.2 The Mesh Screen and Screening

1.2.1 When applying the principles established in the case law of the ECJ to individual circumstances it is important to understand the facts of the particular cases from which those principles are drawn. As with case law more generally, the findings in an individual case must be understood in context. The underlying concept has been described by the Supreme Court in the following terms: "In a precedent-based system, the reasoning of judges has to be approached in the light of the particular problem which was before them. There is a danger in treating a judge's analysis of that problem as a general statement of principle applicable to a whole area of law" (R (P) v. Secretary of State for Justice [2019] UKSC 3; [2020] A.C. 185, per Lord Sumption at [41]). That principle is important here, in order to understand the scope and implications of the ECJ's judgment in the



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People Over Wind case. The case concerned the potential adverse effects of laying a cable connecting a windfarm to the grid on two SACs, one of which was a river habitat for a freshwater mussel species under threat from high levels of sedimentation (para.11). Consent had been granted subject to a condition that the construction was undertaken in accordance with a Construction Management Plan to include 'means to ensure that surface water run-off is controlled such that no silt or other pollutants enter watercourses' (para.12). The screening exercise relied upon the efficacy of those undefined measures (para.17).

- 1.2.2 Thus it can be seen that the measures that the ECJ was considering in that case were not part and parcel of the design of the development for which consent was sought. They were undefined measures to control surface water run-off, which were to be defined and approved at a later stage. That is important when seeking to understand the scope and implications of the principle established in that case.
- 1.2.3 The facts of People Over Wind, and in particular the nature of the 'mitigation' measure that the ECJ had to consider, are materially different to those here. In this case the measure in question is a mesh screen which forms an integral part of the design of the physical structure for which consent is sought. It is not an 'additional' mitigation measure which is separate and distinguishable from the development itself, and it is not a measure 'intended to avoid or reduce the project's harmful effects on that site', which is one of the main principles arising from the People Over Wind ruling. These differences are fundamental to the understanding and application of the underlying principle.
- 1.2.4 Regulation 63 of the Conservation of Habitats and Species Regulations 2017 ('Habitats Regulations') is clear that the assessment must be of the particular 'plan or project'. Necessarily, that will include the specifics of any elements which are integral to the design. In this case it is the incorporation of a screen mesh into the structure, but this is simply an example of the familiar principle of seeking to ensure that the development is designed so as to incorporate features which reduce its environmental impact (as primary mitigation). If, as here, the project for which consent is sought incorporates design features which are relevant to the likelihood of an effect occurring, it would be artificial to screen the project without those features because that assessment would necessarily be carried out in respect of a different physical structure rather than that for which consent is sought. It would therefore be wrong to ignore part of the physical structure, the mesh screen, when carrying out any part of the Regulation 63 test. That is not what the People Over Wind case requires, for the reasons set out above.
- 1.2.5 Notwithstanding the clear legal position, and without prejudice to what is set out above, SZC Co. has provided a sHRA of the effects of the



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desalination plant on migratory fish in order to provide comfort to the ExA. This is set out below. It can be seen that there is no risk of the desalination plant having any adverse effect on the integrity of any European Site as a result of any impact upon migratory fish species.

2 EUROPEAN SITES SCOPING EXERCISE

- 2.1.1 The scoping exercise for the Sizewell C Project, which identifies the European sites and the relevant qualifying interest features to be taken forward into the likely significant effect (LSE) screening stage, is reported in **Section 4** of the **Shadow HRA Report** [APP-145], with update in the first **Shadow HRA Report Addendum** [AS-173 to AS-178]. The scoping exercise for the Sizewell C Project with the inclusion of Proposed Change 19 (the desalination plant) has been revisited specifically for migratory fish (for the reasons described in Part 1 of this note).
- 2.1.2 Proposed Change 19 does not create any new pathways to additional European sites not already assessed in the HRA process and, therefore, it does not alter the outcome of the scoping exercise as report in the **Shadow HRA Report** [APP-145], and updated (with respect to European sites with migratory fish qualifying features) in section 4 of the first **Shadow HRA Report Addendum** [AS-173].
- 2.1.3 On this basis, it is concluded that the following European sites (and qualifying interest features) are relevant to the scope of the assessment of the effects of the proposed change.
 - a) European sites with twaite shad as a qualifying feature
 - Schelde- en Durmeëstuarium van de Nederlandse grens tot Gent Site of Community Importance (SCI).
 - Unterweser SCI.
 - Weser bei Bremerhaven SCI.
 - Nebenarme der Weser mit Strohauser Plate und Juliusplate SCI.
 - Elbe zwischen Geesthacht und Hamburg SAC.
 - Hamburger Unterelbe SAC.
 - Mühlenberger Loch/Neßsand SCI.
 - Rapfenschutzgebiet Hamburger Stromelbe SCI.
 - Unterelbe SCI.



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- Schleswig-Holsteinisches Elbästuar und angrenzende Flächen SCI.
- Marais du Cotentin et du Bessin Baie des Veys SAC.
- Tregor Goëlo SAC.
- b) European sites with river lamprey as a qualifying feature
- Humber Estuary SAC (sea lamprey is also a relevant qualifying feature of this site).
- Schelde- en Durmeëstuarium van de Nederlandse grens tot Gent SAC.
- Unterems und Außenems SCI.
- Ems SCI.
- Weser bei Bremerhaven SAC.
- Weser zwischen Ochtummündung und Rekum SAC.
- Unterweser SCI.
- Nebenarme der Weser mit Strohauser Plate und Juliusplate SCI.
- Lesum SAC.
- Bremische Ochtum SAC.
- Mühlenberger Loch/Neßsand SAC.
- Rapfenschutzgebiet Hamburger Stromelbe SCI.
- Schleswig-Holsteinisches Elbästuar und angrenzende Flächen SAC.
- Unterelbe SCI.
- Treene Winderatter See bis Friedrichstadt und Bollingstedter Au SAC.
- Untereider SAC.
- Havre de Saint-Germain-sur-Ay et Landes de Lessay SAC.
- Marais Vernier, Risle Maritime SAC.



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- c) European sites with allis shad as a qualifying feature
- Plymouth Sound and Estuaries SAC.
- Rivière Laïta, Pointe du Talud, étangs du Loc'h et de Lannenec SAC.
- Estuaire de la Rance SAC.
- Rivière Elle SAC.
- Rivière Elorn SAC.
- Marais du Cotentin et du Bessin Baie des Veys SAC.
- Rivière Leguer, forêts de Beffou, Coat an Noz et Coat an Hay SAC.
- Tregor Goëlo SAC.

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3 SCREENING FOR LIKELY SIGNIFICANT EFFECT

3.1 Relevant screening categories

- 3.1.1 The only relevant screening category (effect pathway) for migratory fish is 'physical interaction between species and infrastructure'. The operation of the desalination could lead, via entrainment, to a localised loss in migratory fish species that are a qualifying interest feature of European sites. As explained at paragraph 5.3.58 of the **Shadow HRA Report Third Addendum** [REP7-279], because the mesh for the desalination abstraction is at the headworks, biota which are not entrained are not drawn into the system at all (i.e. there is no impingement).
- 3.1.2 As reported in the **Shadow HRA Report Third Addendum** [REP7-279], the desalination plant will have a very localised effect on marine water quality and underwater noise. However, there is no direct effect from these pathways on European sites with migratory fish qualifying features and the closest site (the Humber Estuary SAC) is located approximately 163km from the Sizewell C Project. Consequently, the localised effects of the desalination plant on marine water quality and underwater noise are trivial and inconsequential, with no potential to affect migratory fish of European site, either via mortality of by affecting migration pathways.

3.2 Screening for likely significant effect

- 3.2.1 The seawater intake for the desalination plant would consist of a Passive Wedge-Wire Cylinder (PWWC) screen with a mesh size of approximately 2mm. However, as explained in Part 1, the effect of this screen on entrainment of migratory fish has not been taken into account at the LSE screening stage reported in this section.
- 3.2.2 Without the mesh screen, the operation of the desalination plant could lead, via entrainment, to a localised loss in migratory fish species that are a qualifying interest feature of a European site. On a highly precautionary basis, it is concluded that LSE cannot be excluded for all European sites that are scoped into the HRA process (listed in section 1), and these sites are taken through the appropriate assessment stage (section 3).
- 3.2.3 The **Shadow HRA Report** [APP-145], as updated by the first **Shadow HRA Report Addendum** [AS-173 to AS-178], identifies that the only relevant effect pathway for migratory fish for the Sizewell C Project as a whole is 'physical interaction between species and infrastructure' (impingement and entrainment within the operational cooling water system). Because the desalination plant would only be in place for part of the construction phase of the Sizewell C Project, it would not operate at the same time as the operational cooling water system. Consequently,



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there is no potential for a combined effect of entrapment of migratory fish due to the desalination plant and the operational cooling water system acting together. Furthermore, the supplementary analysis of within-Project inter-pathway effects reported in **Appendix 1A** of the first **Shadow HRA Report Addendum** [AS-174] confirms that the only pathway for potential effect on migratory fish is 'physical interaction between species and project infrastructure'. As there is only one identified potential effect pathway, there is no potential for additive or combined inter-pathway effects on migratory fish due to the construction or operation of the desalination plant with the construction or operation of the wider Sizewell C Project.

- 3.2.4 The LSE screening conclusion reported above for the operation of the desalination plant is therefore unaltered when the desalination plant is considered with the wider Sizewell C Project.
- 3.2.5 The **Shadow HRA Report** [APP-145], as updated by the first **Shadow HRA Report Addendum** [AS-173 to AS-178], concluded that there are no other plans or projects that could give rise to an in-combination effect with the Sizewell C Project on European sites with migratory fish qualifying features. The inclusion of the desalination plant does not alter that conclusion.
- 3.2.6 In summary, the LSE screening exercise concludes that LSE cannot be excluded for all European sites that are scoped into the HRA process (listed in section 1), when the effects of the desalination plant are considered:
 - alone;
 - with the wider Sizewell Project; and,
 - in-combination with other plans and projects.



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4 INFORMATION FOR APPROPRIATE ASSESSMENT

4.1 Risk of entrainment of migratory fish

- 4.1.1 The Fourth Environmental Statement Addendum [REP7-029] explains that the abstraction rate for the desalination plant would vary depending on the water demand during the construction phase. At its peak, the water demand would be 4Ml per day (4000m³/d). To achieve this volume of freshwater by Sea Water Reverse Osmosis (SWRO) 10Ml per day (10,000m³/d) of seawater would be abstracted. The abstraction rate for the desalination plant is relatively low and equivalent to less than 0.0009% of the proposed cooling water abstraction (for the Sizewell C Project) once operational and will only occur for a number of years during the construction phase.
- 4.1.2 The seawater intake for the desalination plant would consist of a PWWC screen with a mesh size of approximately 2mm. The screen would be approximately 60cm in diameter and the headworks would be approximately 1.6m in length.
- 4.1.3 The 0 group (fish in the first year of their life) of twaite shad and allis shad is not present in the coastal waters off Sizewell and, therefore, these species are not at risk of entrainment.
- 4.1.4 River lamprey does occur in the coastal waters off Sizewell; however, the 2mm mesh would preclude even the smallest individuals being entrained.
- 4.1.5 Given the above, adverse effect on integrity can be excluded for all European sites with migratory fish qualifying features due to Proposed Change 19. The conclusions of the **Shadow HRA Report** [APP-145], as updated in the first **Shadow HRA Report Addendum** [AS-173], are unchanged with regard to the effect of the Sizewell C Project alone and incombination with other plans and projects.



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APPENDIX B: SZC CO. NOTE IN RESPONSE TO ITEM 20(L)



SIZEWELL C PROJECT -APPENDIX B RESPONSE TO REQUEST 20(L)

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SIZEWELL C PROJECT – APPENDIX B RESPONSE TO REQUEST 20(L)

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PLATES

None

FIGURES

None



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1 ISH15 – RULE 17 LETTER: REQUEST FOR FURTHER INFORMATION

1.1 Item 20(I)

1.1.1 The one other item at agenda item 4 related to the marine mammal baseline and was directed to the Applicant. It was as follows. In Section 6 of the Shadow HRA third addendum we see that it is noted at Section 6 of the Shadow HRA Third Addendum that the Applicant states the reference populations used in the marine mammal assessments have been updated since the Shadow HRA Report [APP-145] and first Shadow HRA Addendum [AS-178] were prepared. These are outlined in Table 6.1 of the Shadow HRA Third Addendum and the marine mammal assessments in Section 9 "have been based on the updated reference populations, as well as the previous reference populations to allow a like-for-like comparison." Could the Applicant tell the ExA how their original HRA assessments for the Proposed Development as a whole would change if they used the updated reference population counts?

1.2 Updated Reference Populations

1.2.1 As outline in Section 6 of the Shadow HRA Third Addendum [REP7-279], since the **Shadow HRA Report** [APP-145] and first **Shadow HRA Addendum** [AS-178] were prepared, the reference populations used in the marine mammal assessments have been updated, as outlined in **Table 1**.

Table 1: Updated Marine Mammal Reference Populations

Species	Previous Reference Population used in Shadow HRA Report [APP-145] and first Shadow HRA Addendum [AS-178]	Updated Reference Populations
Harbour porpoise	345,373 (North Sea Management Unit population estimate based on SCANS-III; Ref. 1)	346,601(North Sea Management Unit population; Ref. 3).
Grey seal	8,716 (South-East England Management Unit; Ref. 2). 6,526 grey seal based on the count at the Donna Nook haul-out site (Ref. 6.2).	8,667 (South-East England Management Unit; Ref. 4). 5,265 grey seal based on the latest available count at the Donna Nook haul-out site (Ref. 6.4).
Harbour seal	4,965 (South-East England Management Unit; Ref. 2).	3,752 (South-East England Management Unit; Ref. 4).



SIZEWELL C PROJECT – APPENDIX B RESPONSE TO REQUEST 20(L)

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Species	Previous Reference Population used in Shadow HRA Report [APP-145] and first Shadow HRA Addendum [AS-178]	Updated Reference Populations
	3,609 harbour seal based on count at The Wash and Blakeney Point haul-out sites (Ref. 2).	l '

- 1.3 Updated Shadow HRA Report [APP-145] Assessments with Updated Reference Populations
- 1.3.1 **Table 2** updates Table 9.26 in the **Shadow HRA Report** [APP-145] providing a comparison of assessments for the previous reference populations with the updated references populations for the potential effects on grey seal from the Humber Estuary SAC.
- 1.3.2 The updated assessments in **Table 2** does not change the previous conclusion in the Shadow HRA Report [APP-145] that 'In relation to the conservation objective for grey seal, there is no potential for adverse effects on the integrity of the Humber Estuary SAC to arise due to the Sizewell C Project either alone or in-combination with other plans or projects'.
- 1.3.3 **Table 3** updates Table 9.38 in the **Shadow HRA Report** [APP-145] providing a comparison of assessments for the previous reference populations with the updated references populations for the potential effects on harbour seal from the Southern North Sea SAC.
- 1.3.4 The updated assessments in **Table 3** does not change the previous conclusion in the Shadow HRA Report [APP-145] that 'There is no potential for any adverse effects on the integrity of the Southern North Sea SAC to arise due to the Sizewell C Project either alone or in-combination with other plans or projects, in relation to the conservation objectives for harbour porpoise'.
- 1.3.5 **Table 4** updates Table 9.49 in the **Shadow HRA Report** [APP-145] providing a comparison of assessments for the previous reference populations with the updated references populations for the potential effects on harbour seal from The Wash and North Norfolk Coast SAC.
- 1.3.6 The updated assessments in **Table 4** does not change the previous conclusion in the Shadow HRA Report [APP-145] that 'In relation to the conservation objective for harbour seal, there is no potential for adverse



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effects on the integrity of The Wash and North Norfolk Coast SAC to arise due to the Sizewell C Project either alone or in-combination with other plans or projects'.



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1.4 Grey seal from the Humber Estuary SAC

Table 2: Summary of the potential effects of the Sizewell C Project on grey seal from the Humber Estuary SAC alone and incombination with other plans and projects - comparison of previous and updated reference populations

Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Previous Assessment of Potential for Adverse Effect on the Integrity of The Site	Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Water quality effects – ma	arine environment				
Potential for water quality effects due to construction related discharges on foraging grey seal and/or grey seal prey species.	0.3 grey seal (0.003% of the South-East England reference population; or 0.005% of the Humber Estuary SAC count).	No	0.3 grey seal (up to 0.0035% of the updated SE MU reference population; or up to 0.0057% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Underwater noise effects	on species populations – gr	ey seal			
Permanent auditory injury (PTS) from a single strike of impact piling (200kJ) on grey seal.	0.00001 grey seal (0.0000001% of the South- East England Management Unit reference population; or 0.0000001% of the	No A Marine Mammal Mitigation Plan for	0.00001 grey seal (0.0000001% of the updated SE England MU reference population; or 0.0000002% of the	No A Marine Mammal Mitigation Plan for	No change to previous assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Previous Assessment of Potential for Adverse Effect on the Integrity of The Site	Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
	Humber Estuary SAC count).	piling would be implemented	updated Humber Estuary SAC count).	piling would be implemented	
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of impact piling (200kJ) on grey seal.	0.008 grey seal (0.00009% of the South- East England Management Unit reference population; or 0.0001% of the Humber Estuary SAC count).	A Marine Mammal Mitigation Plan for piling would be implemented	0.008 grey seal (0.00009% of the updated SE England MU reference population; or 0.00015% of the updated Humber Estuary SAC count).	A Marine Mammal Mitigation Plan for piling would be implemented	No change to previous assessment
Temporary auditory injury (TTS) from a single strike of impact piling (200kJ) on grey seal.	0.00003 grey seal (0.000003% of the South- East England Management Unit reference population; or 0.0000005% of the Humber Estuary SAC count).	No	0.00003 grey seal (0.00000035% of the updated SE England MU reference population; or 0.00000057% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of impact piling (200kJ) on grey seal.	0.4 grey seal (0.005% of the South-East England Management Unit reference population; or 0.006% of the Humber Estuary SAC count).	No	0.4 grey seal (0.005% of the updated SE England MU reference population; or 0.0076% of the updated Humber Estuary SAC count).	No	No change to previous assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Grey Seal from Humber		Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Disturbance of grey seal from impact piling.	41.8 grey seal (0.48% of the South-East England Management Unit reference population; or 0.64% of the Humber Estuary SAC count).	No	41.8 grey seal (0.48% of the updated SE England MU reference population; or 0.79% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of drilling on grey seal.	ory injury 0.00008 grey seal (0.000001% of the South- lative East England Management Unit reference population;		0.00008 grey seal (0.000001% of the updated SE England MU reference population; or 0.0000015% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of dredging on grey seal.	0.002 grey seal (0.00002% of the South- East England Management Unit reference population; or 0.00003% of the Humber Estuary SAC count).	No	0.002 grey seal (0.00002% of the updated SE England MU reference population; or 0.000038% of the updated Humber Estuary SAC count).	No	No change to previous assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC Potential in Adverse Ethe Integri		Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of drilling on grey seal.	0.00008 grey seal (0.000001% of the South- East England Management Unit reference population; or 0.000001% of the Humber Estuary SAC count).	No	0.00008 grey seal (0.000001% of the updated SE England MU reference population; or 0.0000015% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of dredging on grey seal.	0.5 grey seal (0.006% of the South-East England Management Unit reference population; or 0.008% of the Humber Estuary SAC count).	No	0.5 grey seal (0.006% of the update SE England MU reference population; or 0.0095% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Permanent auditory injury (PTS) for effects on grey seal from UXO clearance.	0.4 grey seal (0.005% of the South-East England Management Unit reference population; 0.007% of the Humber Estuary SAC count).	A Marine Mammal Mitigation Plan for UXO clearance would be implemented	0.4 grey seal (0.005% of the updated SE England MU reference population; or 0.0076% of the updated Humber Estuary SAC count).	A Marine Mammal Mitigation Plan for UXO clearance would be implemented	No change to previous assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Previous Assessment of Potential for Adverse Effect on the Integrity of The Site	Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Disturbance effects on gr	ey seal prey species				
Behavioural response of grey seal prey species to impact piling.	0.4 grey seal (0.0004% of the South-East England Management Unit reference population; 0.0006% of the Humber Estuary SAC count).	No	0.4 grey seal (0.005% of the updated SE England MU reference population; or 0.0076% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Physical interaction betw	een species and project infra	structure			
Increased collision risk of grey seal and vessels.	0.01 grey seal (0.0001% of the South-East England Management Unit reference population; or 0.0002% of the Humber Estuary SAC count).	No	0.01 grey seal (0.0001% of the updated SE England MU reference population; 0.0002% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Water quality effects - ma	arine environment				
Potential for water quality effects due to operational chemical discharges on	0.3 grey seal (0.003% of the South-East England reference	No	0.3 grey seal (up to 0.0035% of the updated SE MU reference	No	No change to previous assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Previous Assessment of Potential for Adverse Effect on the Integrity of The Site	Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
foraging grey seal and/or grey seal prey species.	population; or 0.005% of the Humber Estuary SAC count).		population; or up to 0.0057% of the updated Humber Estuary SAC count).		
Potential for water quality effects due to operational thermal discharge on foraging grey seal and/or grey seal prey species.	8.5 grey seal (0.10% of the South-East England reference population; or 0.13% of the Humber Estuary SAC count).	No	8.5 individuals (up to 0.1% of the updated SE MU reference population; or up to 0.16% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Physical interaction betw	een species and project infra	astructure			
Increased collision risk of grey seal and vessels.	0.01 grey seal (0.0001% of the South-East England Management Unit reference population; 0.0002% of the Humber Estuary SAC count).	No	0.01 grey seal (0.0001% of the updated SE England MU reference population; 0.0002% of the updated Humber Estuary SAC count).	No	No change to previous assessment
Impingement of prey species	1.6 grey seal (0.018% of the South-East England Management Unit	No	1.6 grey seal (0.018% of the updated SE England MU reference	No	No change to previous assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Previous Assessment of Potential for Adverse Effect on the Integrity of The Site	Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
	reference population; or 0.025% of the Humber Estuary count).		population; 0.03% of the updated Humber Estuary count).		
Water quality effects	None of the projects included in the incombination assessment for any changes to water quality would have the potential to have any incombination effects on foraging harbour seal, or their prey species.	No	None of the projects included in the incombination assessment for any changes to water quality would have the potential to have any incombination effects on foraging harbour seal, or their prey species.	No	No change to previous assessment
Disturbance from underwater noise	123.5 grey seal (1.4% of the South-East England reference population; or 1.9% of the Humber Estuary SAC count).	No	123.5 grey seal (1.4% of the updated SE England MU reference population; or 2.35% of the updated Humber Estuary SAC count).	No The contribution to in-combination effects for underwater noise would be limited. Taking the short duration of piling for	No, although the % of the updated Humber Estuary SAC count has increased from 1.9% to 2.35%, this does not change the overall assessment



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Potential Effect	Previous Assessment of Grey Seal from Humber Estuary SAC	Previous Assessment of Potential for Adverse Effect on the Integrity of The Site	Updated Assessment of Grey Seal from Humber Estuary SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
				the Sizewell C Project into account, an adverse effect on the integrity of the Humber Estuary SAC is not predicted to arise in relation to its conservation objectives for grey seal as a result of in-combination disturbance effects from underwater noise.	
Increased collision risk with vessels.	0.4 grey seal (0.005% of the South-East England reference population; or 0.006% of the Humber Estuary SAC count).	No	0.4 grey seal (0.005% of the updated SE England MU reference population; or 0.0076% of the updated Humber Estuary SAC count).	No	No change to previous assessment



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1.5 Harbour porpoise from the Southern North Sea SAC

Table 3: Summary of the potential effects of the Sizewell C Project on harbour porpoise from the Southern North Sea SAC alone and in-combination with other plans and projects - comparison of previous and updated reference populations

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Water quality effects -	- marine environmen	<u> </u>				
Potential for water quality effects due to construction related discharges on harbour porpoise and/or harbour porpoise prey species.	Up to 4.4 harbour porpoise (0.001% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.06%) at any one time and would not exceed 10% (up to 0.06%) of the duration of the winter season.	No	Up to 4.4 harbour porpoise (0.001% of the updated North Sea Management Unit).	No	No change to previous assessment
Direct habitat loss and	d direct / indirect hab	itat fragmentation				
Potential for temporary habitat change during construction.	0.006 harbour porpoise (0.000002% of the	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.00007%) at any one	No	0.006 harbour porpoise (0.000002% of updated the	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
	North Sea Management Unit).	time and would not exceed 10% (up to 0.00007%) of the duration of the winter season.		North Sea Management Unit).		
Underwater noise effe	ects on species popu	lations – harbour porpoise				
Permanent auditory injury (PTS) from a single strike of impact piling (200kJ) on harbour porpoise.	0.003 harbour porpoise (0.000001% of the North Sea Management Unit).	N/A	No A Marine Mammal Mitigation Plan for piling would be implemented	0.003 harbour porpoise (0.000001% of the updated North Sea Management Unit).	No	No change to previous assessment
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of impact piling (200kJ) on harbour porpoise.	3.4 harbour porpoise (0.001% of the North Sea Management Unit).	N/A	No A Marine Mammal Mitigation Plan for piling would be implemented	3.4 harbour porpoise (0.001% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Temporary auditory injury (TTS) from a single strike of impact piling (200kJ) on harbour porpoise.	0.008 harbour porpoise (0.000002% of the North Sea Management Unit).	N/A	No	0.008 harbour porpoise (0.000002% of the updated North Sea Management Unit).	No	No change to previous assessment
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of impact piling (200 kJ) on harbour porpoise.	62 harbour porpoise (0.02% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.8%) at any one time and would not exceed 10% (up to 0.05%) of the duration of the winter season.	No	62 harbour porpoise (0.02% of the updated North Sea Management Unit).	No	No change to previous assessment
Disturbance of harbour porpoise from impact piling.	587 harbour porpoise (0.17% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 7.6%) at any one time and would not exceed 10% (up to 0.5%) of the	No	587 harbour porpoise (0.17% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
		duration of the winter season.				
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of drilling on harbour porpoise.	0.006 harbour porpoise (0.000002% of the North Sea Management Unit).	N/A	No	0.006 harbour porpoise (0.000002% of the updated North Sea Management Unit).	No	No change to previous assessment
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of dredging on harbour porpoise.	3.8 harbour porpoise (0.001% of the North Sea Management Unit).	N/A	No	3.8 harbour porpoise (0.001% of the updated North Sea Management Unit).	No	No change to previous assessment
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of drilling on harbour porpoise.	2.6 harbour porpoise (0.0008% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.03%) at any one time and would not exceed 10% (up to 0.03%) of the	No	2.6 harbour porpoise (0.0008% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
		duration of the winter season.				
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of dredging on harbour porpoise.	87 harbour porpoise (0.03% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 1.1%) at any one time and would not exceed 10% (up to 1.1%) of the duration of the winter season.	No	87 harbour porpoise (0.03% of the updated North Sea Management Unit).	No	No change to previous assessment
Permanent auditory injury (PTS) for effects on harbour porpoise from UXO clearance.	Up to 179 harbour porpoise (up to 0.05% of the North Sea Management Unit).	N/A	No A Marine Mammal Mitigation Plan for UXO clearance would be implemented	Up to 179 harbour porpoise (up to 0.05% of the updated North Sea Management Unit).	No	No change to previous assessment
Disturbance effects o	n harbour porpoise p	rey species				
Behavioural response of harbour porpoise	6 harbour porpoise (0.002% of the	Temporary displacement would not exceed 20% of the SAC winter area (up	No	6 harbour porpoise (0.002% of the	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
prey species to impact piling (200kJ).	North Sea Management Unit).	to 0.08%) at any one time and would not exceed 10% (up to 0.01%) of the duration of the winter season.		updated North Sea Management Unit).		
Physical interaction b	etween species and	project infrastructure				
Increased collision risk of harbour porpoise and vessels.	4 harbour porpoise (0.001% of the North Sea Management Unit).	N/A	No	4 harbour porpoise (0.001% of the updated North Sea Management Unit).	No	No change to previous assessment
Water quality effects	– marine environmen	t		1	Γ	T
Potential for water quality effects due to operational chemical discharges on harbour porpoise and/or harbour	4.4 harbour porpoise (0.001% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.06%) at any one time and would not exceed 10% (up to 0.06%) of the	No	Up to 4.4 harbour porpoise (0.001% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
porpoise prey species.		duration of the winter season.				
Potential for water quality effects due to operational thermal discharge on harbour porpoise and/or harbour porpoise prey species.	136.3 harbour porpoise (0.04% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 1.8%) at any one time and would not exceed 10% (up to 1.8%) of the duration of the winter season.	No	136.3 harbour porpoise (0.04% of the updated North Sea Management Unit).	No	No change to previous assessment
Direct habitat loss and	d direct / indirect hab	itat fragmentation	1			1
Potential for long-term habitat loss due to the introduction of hard structures.	0.01 harbour porpoise (0.000004% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.0002%) at any one time and would not exceed 10% (up to 0.0002%) of the duration of the winter season.	No	0.01 harbour porpoise (0.000003% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Increased collision risk of harbour porpoise and vessels.	4 harbour porpoise (0.001% of the North Sea Management Unit).	N/A	No	4 harbour porpoise (0.001% of the updated North Sea Management Unit).	No	No change to previous assessment
Impingement of prey species	25 harbour porpoise (0.007% of the North Sea Management Unit reference population).	Temporary displacement would not exceed 20% of the SAC winter area (up to 0.3%) at any one time and would not exceed 10% (up to 0.3%) of the duration of the winter season.	No	25 harbour porpoise (0.007% of the updated North Sea Management Unit reference population).	No	No change to previous assessment
Water quality effects	476 harbour porpoise (0.12% of the North Sea Management Unit).	Temporary displacement would not exceed 20% of the SAC winter area (up to 6.2%) at any one time and would not exceed 10% (up to 6.2%) of the	No	476 harbour porpoise (0.14% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
		duration of the winter season.				
Habitat loss	33.3 harbour porpoise (0.01% of the North Sea Management Unit).	Displacement would not exceed 20% of the SAC winter area (up to 0.4%) at any one time and would not exceed 10% (up to 0.4%) of the duration of the winter season.	No	33.3 harbour porpoise (0.01% of the updated North Sea Management Unit).	No	No change to previous assessment
Disturbance from underwater noise	2,530 harbour porpoise (0.74% of the North Sea Management Unit).	Maximum total area of potential disturbance could be up to 32.8% of the SAC winter area, however, the seasonal average for the winter period would only be 1.46% for the 12 piling days for the Sizewell C Project.	No	2,530 harbour porpoise (0.73% of the updated North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Porpoise from SNS SAC	Spatial and Temporal Assessment in Relation to the Winter Area	Previous Assessment of Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Porpoise from SNS SAC	Updated Assessment of Potential for Adverse Effect on the Integrity of the Site	Change
Increased collision risk with vessels.	87 harbour porpoise (0.025% of the North Sea Management Unit).	N/A	No	87 harbour porpoise (0.025% of the North Sea Management Unit).	No	No change to previous assessment



NOT PROTECTIVELY MARKED

1.6 Harbour seal from The Wash and North Norfolk Coast SAC

Table 4: Summary of the potential effects of the Sizewell C Project on harbour seal from The Wash and North Norfolk Coast SAC alone and in-combination with other plans and projects - comparison of previous and updated reference populations

Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
0.3 harbour seal (0.006% of the South-East England reference population; or 0.008% of The Wash and	No	0.3 harbour seal (0.008% of the updated SE England MU reference population; or 0.01% of	No	No, although the % of the updated The Wash and North Norfolk Coast SAC count
count).		North Norfolk Coast SAC count).		has increased slightly, this does not change the overall assessment
	e environment 0.3 harbour seal (0.006% of the South-East England reference population; or 0.008% of The Wash and North Norfolk Coast SAC count).	and North Norfolk Coast SAC Potential for Adverse Effect on the Integrity of the Site e environment 0.3 harbour seal (0.006% of the South-East England reference population; or 0.008% of The Wash and North Norfolk Coast SAC	Potential for Adverse Effect on the Integrity of the Site O.3 harbour seal (0.006% of the South-East England reference population; or 0.008% of The Wash and North Norfolk Coast SAC count). No O.3 harbour seal (0.008% of the updated SE England MU reference population; or 0.01% of updated The Wash and North Norfolk Coast SAC count).	Potential for Adverse Effect on the Integrity of the Site Potential for Adverse Effect on the Integrity of the Site No 0.3 harbour seal (0.006% of the South-East England reference population; or 0.008% of The Wash and North Norfolk Coast SAC count). No 0.3 harbour seal (0.008% of the updated SE England MU reference population; or 0.01% of updated The Wash and North Norfolk Coast SAC count).



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
Permanent auditory injury (PTS) from a single strike of impact piling (200kJ) on harbour seal.	0.00001 harbour seal (0.0000002% of the South- East England reference population; or 0.0000003% of The Wash and North Norfolk Coast SAC count).	No A Marine Mammal Mitigation Plan for piling would be implemented	0.00001 harbour seal (0.00000027% of the updated SE England MU reference population; or 0.00000036% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of impact piling (200kJ) on harbour seal.	0.008 harbour seal (0.0002% of the South-East England reference population; or 0.0002% of The Wash and North Norfolk Coast SAC count).	No	0.008 harbour seal (0.0002% of the updated SE England MU reference population; or 0.00029% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Temporary auditory injury (TTS) from a single strike of impact piling (200kJ) on harbour seal.	0.00003 harbour seal (0.0000006% of the South- East England reference population; or 0.0000009% of The Wash and North Norfolk Coast SAC count).	No	0.00003 harbour seal (0.0000008% of the updated SE England reference MU population; or 0.000001% of The	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
			Wash and North Norfolk Coast SAC count).		
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of impact piling (200kJ) on harbour seal.	0.4 harbour seal (0.008% of the South-East England reference population; or 0.01% of The Wash and North Norfolk Coast SAC count).	No	0.4 harbour seal (0.01% of the updated SE England MU reference population; or 0.015% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Disturbance of harbour seal from impact piling.	43 harbour seal (0.87% of the South-East England reference population; or 1.19% of The Wash and North Norfolk Coast SAC count).	No	43 harbour seal (1.15% of the updated SE England MU reference population; or 1.6% of updated The Wash and North Norfolk Coast SAC count).	No	No, although the % of the updated The Wash and North Norfolk Coast SAC count has increased slightly, this does not change the overall assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of drilling on harbour seal.	0.00008 harbour seal (0.000002% of the South-East England reference population; or 0.000002% of The Wash and North Norfolk Coast SAC count).	No	0.00008 harbour seal (0.000002% of the updated SE England MU reference population; or 0.000003% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Permanent auditory injury (PTS) from cumulative exposure (24 hours, stationary model) of dredging on harbour seal.	0.002 harbour seal (0.00004% of the South-East England reference population; or 0.00006% of The Wash and North Norfolk Coast SAC count).	No	0.002 harbour seal (0.00005% of the updated SE England MU reference population; or 0.00007% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of drilling on harbour seal.	0.00008 harbour seal (0.000002% of the South-East England reference population; or 0.000002% of The Wash and North Norfolk Coast SAC count).	No	0.00008 harbour seal (0.000002% of the updated SE England MU reference population; or 0.000003% of updated The Wash and North	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
			Norfolk Coast SAC count).		
Temporary auditory injury (TTS) from cumulative exposure (24 hours, stationary model) of dredging on harbour seal.	0.6 harbour seal (0.01% of the South-East England reference population; or 0.02% of The Wash and North Norfolk Coast SAC count).	No	0.6 harbour seal (0.016% of the updated SE England MU reference population; or 0.02% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Permanent auditory injury (PTS) for effects on harbour seal from UXO clearance.	0.4 harbour seal (0.009% of the South-East England reference population; reference population; 0.01% of The Wash and North Norfolk Coast SAC count).	No A Marine Mammal Mitigation Plan for UXO clearance would be implemented	0.4 harbour seal (0.01% of the updated SE England MU reference population; or 0.015% of updated The Wash and North Norfolk Coast SAC count).	No A Marine Mammal Mitigation Plan for UXO clearance would be implemented	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
Behavioural response of harbour seal prey species to impact piling.	0.4 harbour seal (0.008% of the South-East England reference population; or 0.001% of The Wash and North Norfolk Coast SAC count).	No	0.4 harbour seal (0.01% of the updated SE England MU reference population; or 0.015% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Physical interaction between	n species and project infrastruc	ture			
Increased collision risk of harbour seal and vessels.	0.01 harbour seal (0.0002% of the South-East England reference population; or 0.0003% of The Wash and North Norfolk Coast SAC count).	No	0.01 harbour seal (0.00027% of the updated SE England MU reference population; or 0.00036% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment
Water quality effects - mari	ne environment				
Potential for water quality effects due to operational chemical discharges on	0.3 harbour seal (0.006% of the South-East England reference population;	No	0.3 harbour seal (0.008% of the updated SE England MU reference	No	No, although the % of the updated The Wash and



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
foraging harbour seal and/or harbour seal prey species.	or 0.008% of The Wash and North Norfolk Coast SAC count).		population; or 0.01% of updated The Wash and North Norfolk Coast SAC count).		North Norfolk Coast SAC count has increased slightly, this does not change the overall assessment
Potential for water quality effects due to operational thermal discharge on foraging harbour seal and/or harbour seal prey species.	8.8 harbour seal (0.18% of the South-East England reference population; or 0.24% of The Wash and North Norfolk Coast SAC count).	No	8.8 harbour seal (0.24% of the updated SE England MU reference population; or 0.32% of updated The Wash and North Norfolk Coast SAC count).	No	No, although the % of the updated The Wash and North Norfolk Coast SAC count has increased, this does not change the overall assessment
Physical interaction betwee	n species and project infrastruc	ture			•
Increased collision risk of harbour seal and vessels.	0.01 harbour seal (0.0002% of the South-East England reference population;	No	0.01 harbour seal (0.00027% of the updated SE England MU reference	No	No change to previous assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
	or 0.0003% of The Wash and North Norfolk Coast SAC count).		population; or 0.00036% of updated The Wash and North Norfolk Coast SAC count).		
Impingement of prey species	1.6 harbour seal (0.03% of the South-East England Management Unit reference population; 0.04% of The Wash and North Norfolk Coast SAC count).	No	1.6 harbour seal (0.043% of the updated SE England MU reference population; 0.06% of updated The Wash and North Norfolk Coast SAC count).	No	No, although the % of the updated The Wash and North Norfolk Coast SAC count has increased slightly, this does not change the overall assessment
Water quality effects	None of the projects included in the in-combination assessment for any changes to water quality would have the potential to have any incombination effects on	No	No change	No	No change



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
	foraging harbour seal, or their prey species				
Disturbance from underwater noise	186 harbour seal (3.75% of the South-East England Management Unit; or 5.2% of The Wash and North Norfolk Coast SAC count).	No	186 harbour seal (4.96% of the updated SE England MU reference population; or 6.78% of updated The Wash and North Norfolk Coast SAC count).	No The contribution to in-combination effects for underwater noise would be limited. Taking the short duration of piling for the Sizewell C Project into account, an adverse effect on the integrity of The Wash and North Norfolk Coast SAC is not predicted to arise in relation to its conservation objectives for	No, although the % of the updated The Wash and North Norfolk Coast SAC count has increased, this does not change the overall assessment



NOT PROTECTIVELY MARKED

Potential Effect	Previous Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Previous Assessment Potential for Adverse Effect on the Integrity of the Site	Updated Assessment of Harbour Seal from The Wash and North Norfolk Coast SAC	Updated Assessment Potential for Adverse Effect on the Integrity of the Site	Change
				harbour seal as a result of incombination disturbance effects from underwater noise.	
Increased collision risk with vessels.	0.44 harbour seal (0.009% of the South-East England reference population; or 0.01% of The Wash and North Norfolk Coast SAC count).	No	0.44 harbour seal (0.01% of the updated SE England MU reference population; or 0.016% of updated The Wash and North Norfolk Coast SAC count).	No	No change to previous assessment



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- 1.7 Updated first Shadow HRA Addendum [AS-178] Assessments with Updated Reference Populations
- 1.7.1 **Table 5** updates the assessments in the first **Shadow HRA Addendum** [AS-178] providing a comparison of assessments for the previous reference populations with the updated references populations for the potential effects on grey seal from the Humber Estuary SAC, harbour porpoise from the Southern North Sea SAC and harbour seal from The Wash and North Norfolk Coast SAC.
- 1.7.2 The updated assessments in **Table 5** does not change the previous conclusion in the first **Shadow HRA Addendum** [AS-178] that no adverse effect on the integrity of the Humber Estuary SAC, Southern North Sea SAC and The Wash and North Norfolk Coast SAC is predicted due to disturbance from impact piling associated with the Sizewell C Project in relation to the conservation objectives for harbour porpoise, grey seal and harbour seal, respectively. This remains unchanged from the assessment in the Shadow HRA Report [APP-145].



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Table 5: Comparison of previous and updated reference populations in the First Shadow HRA Addendum for grey seal from the Humber Estuary SAC, harbour porpoise from the Southern North Sea SAC and harbour seal from The Wash and North Norfolk SAC

First Shadow HRA	Previous Assessment	Updated Assessment	Change			
Addendum Reference						
9.3 Assessment of effects on grey seal from Humber Estuary SAC						
a) Disturbance from underwater	ter noise during piling					
Paragraph 9.3.2	For the disturbance area of up to up to 456.33km², the number of grey seal that could be disturbed is up to 17.34. This represents 0.21% of the South-East England Management Unit reference population; or 0.28% of the Humber Estuary SAC count.	17.34 grey seal (0.2% of the updated SE England MU reference population; or 0.33% of the updated Humber Estuary SAC count).	No significant change in % of updated reference populations. No change to assessment that: 'Taking into account the temporary disturbance and intermittent duration of underwater noise from piling, along with the relatively low and infrequent number of grey seal in and around the Sizewell C main development site, there are unlikely to be any significant disturbance or barrier effects for foraging grey seal. Therefore, under these circumstances, no direct adverse effect on the integrity of the Humber Estuary SAC is predicted as a result of disturbance during impact piling for the construction of the Sizewell C main development site in relation to the conservation objectives for grey seal. This remains unchanged from the assessment in the Shadow HRA Report [APP-145]'.			
9.4 Assessment of effects on harbour porpoise from Southern North Sea SAC						
 a) Disturbance from underwate 	ter noise during piling					



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First Shadow HRA Addendum Reference	Previous Assessment	Updated Assessment	Change
Paragraph 9.4.2	For the disturbance area of up to 341.07km², the number of harbour porpoise that could be disturbed is up to 207. This represents 0.06% of the North Sea Management Unit.	207 harbour porpoise (0.06% of updated North Sea MU)	No change to previous assessment
	n harbour seal from The Wash	n and North Norfolk Coast SA	С
a) Disturbance from underwat			
Paragraph 9.5.2	For the disturbance area of up to up to 456.33km², the number of harbour seal that could be disturbed is up to 17.8. This represents 0.36% of the South-East England Management Unit reference population; or 0.28% of The Wash and North Norfolk Coast SAC count.	17.8 harbour seal (0.5% of the updated SE England MU reference population; or 0.65% of updated The Wash and North Norfolk Coast SAC count).	No change to assessment that: 'Taking into account the temporary disturbance and intermittent duration of underwater noise from piling, along with the relatively low and infrequent number of harbour seal in and around the Sizewell C main development site, there are unlikely to be any significant disturbance or barrier effects for foraging harbour seal. Therefore, under these circumstances, no direct adverse effect on the integrity of The Wash and North Norfolk Coast SAC is predicted as a result of disturbance during impact piling for the construction of the Sizewell C main development site in relation to the conservation objectives for harbour seal. This remains unchanged from the assessment in the Shadow HRA Report [APP-145]'.



NOT PROTECTIVELY MARKED

REFERENCES

- Ref. 1 P. S. Hammond et al. Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Wageningen Marine Research. 2017.
- Ref. 2 Special Committee on Seals. Scientific Advice on Matters Related to the Management of Seal Populations. 2018. (Online). Available from: http://www.smru.st-andrews.ac.uk (Accessed 21 July 2019).
- Ref. 3 IAMMWG. Updated abundance estimates for cetacean Management Units in UK waters. JNCC Report No. 680, JNCC Peterborough, ISSN 0963-8091. 2021. (Online). Available from: https://data.jncc.gov.uk/data/3a401204-aa46-43c8-85b8-5ae42cdd7ff3/JNCC-Report-680-FINAL-WEB.pdf (Accessed 25 August 2021).
- Ref. 4 Special Committee on Seals. Scientific Advice on Matters Related to the Management of Seal Populations. 2020. (Online). Available from: http://www.smru.st-andrews.ac.uk/files/2021/06/SCOS-2020.pdf (Accessed 25 August 2020).



SIZEWELL C PROJECT - SZC CO RESPONSE TO REQUEST FOR FURTHER INFORMATION **ISSUED ON 6 OCTOBER 2021**

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APPENDIX C: SZC CO. NOTE IN RESPONSE TO ITEM 21

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SIZEWELL C PROJECT - RESPONSE TO REQUEST 21

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FIGURES

Figure A: Smoothed HGV profile from [REP7-071] paragraph 1.9.2

Figure B: Material Imports and Modal Split [REP5-114] Figure 1 - Early Years HGV Proportions

ANNEXES

ANNEX A: HGV PROFILE SPREADSHEET



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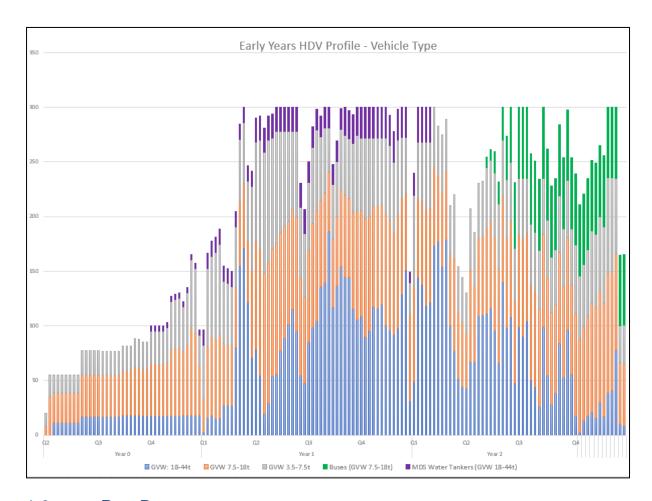
- 1 RULE 17: REQUEST FOR ADDITIONAL INFORMATION 6 OCTOBER 2021
- 1.1 Item 21: Early Years Transport Clarification
- 1.2 Part A:

"The histogram in paragraph 1.9.2 [REP7-071] shows a smoothed HDV profile. It is not possible from this to ascertain any precise details. Provide an update to Figure 1 (The Early Years) of the Material Imports and Modal Split [REP5-114] that clearly annotates the smoothed HDV profile provided at Deadline 7."

- 1.2.1 A revised Early Years HDV vehicle type histogram has been produced at **Plate 1** below, including Year 0 Pre-commencement and enabling works. For clarity water tankers and buses that will route down the B1122 to the MDS are shown separately, however these would represent gross vehicle weight (GVW):18-44t and GVW:7.5-18t type vehicles respectively.
- 1.2.2 For ease of reference the previous revision is shown together in **Annex A**, Figures A and B at the end of this note.



Plate 1- Revised Early year HDV profile with vehicle types



1.3 Part B:

"Additionally, it is noted that in the latest version of the Implementation Plan / Phasing Schedule there are a number of activities, including the desalination plant construction that start in Year 0 and HDV flows in Year 0 should be included in the Early Years assessment."

1.3.1 These Year 0 - Pre-commencement and Enabling works movements and the corresponding Relocated Facilities movements have been added to the HDV vehicle type histogram in **Plate 1** above and **Plate 2** in the Early Years HDV profile narrative below.

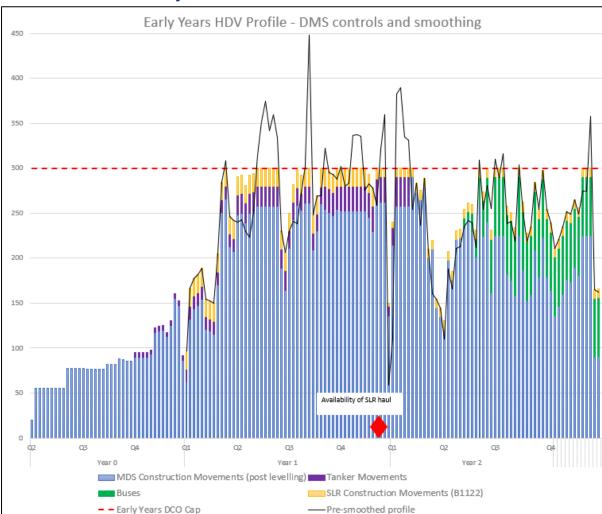


Plate 2 - Early Years HDV Profile

1.4 Part C:

"Ensure that it is possible to read the numerical values on the histogram and it clearly identifies the following

- i. HGV by size as previously in Figure 1 [REP5-114];
- ii. Water tankers; and
- iii. Buses"
- 1.4.1 The revised Early Years HDV profile, **Plate 1** above, has been updated to show:
 - HDV vehicle profile updated to align with smoothed profile following mitigation to control the exceedances of the cap.



- Vehicle movements by type/ size
- GVW 18-44t
- o GVW 7.5-18t
- GVW 3.5-7.5t
- Buses. These were excluded in the Figure 1 [REP7-071] version but have now been added. These are GVW 7.5-18t type vehicles but shown separately for clarity.
- Water tankers, which are GVW 18-44t type vehicles have been shown separately for clarity.
- Cars and LGVs (GVW <3.5t) are not shown on the histogram as they do not count towards the HDV/HGV movements caps.

1.5 Part D:

"To supplement this, provide a spreadsheet of the background data for the histogram of daily proportion by week, that shows the following –

i. HGV to the Main Development Site (MDS), including the accommodation campus and the LEEIE;"

- 1.5.1 Please see attached spreadsheet at **Annex B** which includes HGV movements along the B1122 to the MDS, which includes HGV movements to the LEEIE and accommodation campus as well as HGV movements associated with the improvements along Lover's Lane and the Green Rail Route as well as Sizewell B relocated facilities. Refer to below Early Years HDV profile narrative for details.
 - ii. HGV for the Associated Development sites, this is assumed to be the Sizewell Link Road (SLR) (and the Two Village Bypass to/from stockpiles on MDS prior to completion of the rail bridge on the SLR Please confirm this is a correct assumption and confirm the point on the histogram where the SLR haul road is available.
- 1.5.2 The HGV movements for the AD sites are associated with the SLR construction and are split into two categories:
 - Mass balance movements via the SLR haul route
 - Imported construction materials movements along the B1122



- 1.5.3 The HGVs that are included on the histogram are those that route along the B1122. These are not associated with the transport of material to/from the stockpiles on the MDS, rather the import of construction materials for the SLR. The movement of material to the stockpiles does not occur until the SLR haul route is available. Therefore, the assumption in the question is not correct.
 - iii. The HGV numbers using the SLR as a haul road
- 1.5.4 Please refer to the attached spreadsheet (**Annex B**) which includes both these HGV movements and refer to **Section 2** Early Years HDV profile narrative for details.
 - iv. Both direct and park and ride bus services
- 1.5.5 Please see attached spreadsheet (**Annex B**) which includes Park and Ride and direct bus movements to the MDS and refer to **Section 2** Early Years HDV profile narrative for details.
 - v. Water tankers
- 1.5.6 Water tankers are split into two categories:
 - a. Water tankers to the MDS travelling via the B1122
 - b. Water tankers for the off-site associated developments which do not access via the B1122
- 1.5.7 Please refer to the attached spreadsheet (**Annex B**) which includes both these types of water tanker movements and refer to **Section 2** Early Years HDV profile narrative for details
 - vi. Assumed HGV flows for the Scottish Power application. (it is understood that this will not appear on the histogram and this is not included in the proposed cap level but is required to have an overall picture of the HDV movements for the cumulative assessment.
- 1.5.8 The movements associated with the Scottish Power works on the B1122 have not been included within previous SZC HGV profile and will not form part of the HDV/HGV caps in either the Early Years or Peak Construction phases of the project. The HGV movements on the B1122 for the ScottishPower Renewables (SPR) works that have been assessed in the cumulative impact assessment are included within the attached spreadsheet. A total of 100 two-way HGV movements (50 HGVs each way) were assessed for SPR on the B1122 (at Theberton) in the early years for the cumulative assessment.

2 EARLY YEAR HDV PROFILE NARRATIVE

2.1 Introduction

- 2.1.1 The Examining Authority noted during ISH15 that the HGV profile for the project was difficult to review, particularly in the Early Years (Years 1 and 2) when the HGV movements comprise of a number of different movements for the various components of the project. The recent inclusion of buses and water tankers has also led to a question as to how these additional movements are able to be incorporated within the existing caps, leading to a queries as to whether the caps are too high or there was a need to delay works that would impact the delivery programme.
- 2.1.2 SZC Co. therefore seeks to provide greater clarity and a more granular profile for this Early Years period as set out in the above revised Figures 1 2 and Table 1, and explained further in the following narrative.

2.2 MDS Construction Movements

- 2.2.1 The MDS construction HGVs shown in figures 1 and 2 are all the required HGV (3.5 to 44t GVW) deliveries required for the construction works within the MDS. This includes:
 - The ongoing Relocated Facilities (RF) works;
 - Phase 1 Site establishment works within the MDS, inc. LEEIE (ACA),
 TCA and MCA;
 - The construction, operation and decommissioning works for the desalination plant;
 - LEEIE (ACA) rail head and Green Rail Route construction;
 - Accommodation campus construction; and
 - Adoptable highways and access point works, including along Lover's Lane.
- 2.2.2 Note that the buses and water tankers, which have recently been included in the profile, are described separately below.
- 2.2.3 These MDS movements represent the majority of the volume of work during the Early Years period which will require HDV movements along the B1122, excluding water tankers and buses. They have been assessed based on the resource loaded construction and delivery programme.

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- SZC Co initially presented the HGV profile for these works as an unmitigated profile in response to ExQ1 [TT.1.16] [REP2-100]. This indicated several discrete exceedances of the 300 HGV deliveries (600 two-way movements) cap. It was further requested by the Examining Authority that the mitigated profile was provided showing the profile with the controls of the DMS applied. This smoothing has levelled off the peaks, in general requiring the advanced import of some material prior to the HGV peaks with a small number of non-critical construction activities being postponed later in the construction programme. This profile was submitted at Deadline 7 [REP7-071].
- 2.2.5 It should also be noted that in the initial profiles prior to the production of the detailed profile, there was an allowance for 10 water tankers (20 two-way water tanker movements) per day due to the expected requirement to complete water connections into the site. These 20 two-way movements have now been removed from the forecast, in-lieu of the requirements now assessed and presented in the Water Supply Strategy [REP7-036] table 3-1.
- 2.2.6 The MDS construction movements shown on the Early Years HDV Profiles, Figure 1 and 2 above, are therefore the forecast number of HGVs movements along the B1122 during the Early Years for the MDS construction works noted above excluding any allowance for water tankers and buses which are included separately.

2.3 Water Tanker Movements

- 2.3.1 The water tanker movements are shown separately to the MDS construction vehicles to allow a granular assessment of the different required movements to be made. The tanker movements are assessed in line with the Water Supply Strategy [REP7-036] table 3-1.
- 2.3.2 It should be noted however that the required number of tankers stated in table 3-1 of the Water Supply Strategy do not all require access to the MDS. The water requirements also include allowances for the off-site Associated Developments such as the Park and Rides and Sizewell Link Road. These tanker movements will not therefore need to access along the B1122 and do not contribute to the HGV movements measured against the cap.
- 2.3.3 The number of tankers required for the off-site construction works is indicated below in Table 2. When these deductions are considered the allowance made for tanker movements to the MDS along the B1122 and included within the cap is lower that the deliveries stated in the Water Supply Strategy. Therefore, the number of HGV tanker movements allowed for in the HDV profile is shown below in Table 2.



Table 1: Potable water demand, Off-site Associated Developments and MDS

	Tankers	deliveries	5:
Month	Off-site AD's	MDS	Total
Oct-22	0	5	5
Nov-22	0	5	5
Dec-22	0	5	5
Jan-23	1	14	15
Feb-23	1	14	15
Mar-23	2	13	15
Apr-23	6	9	15
May-23	7	23	30
Jun-23	8	22	30
Jul-23	10	20	30
Aug-23	10	20	30
Sep-23	13	24	37
Oct-23	12	25	37
Nov-23	9	28	37
Dec-23	5	32	37
Jan-24	5	32	37
Feb-24	3	0	3
Mar-24	5	0	5
Apr-24	5	0	5
May-24	5	0	5
Jun-24	5	0	5
Jul-24	5	0	5
Aug-24	5	0	5
Sep-24	5	0	5
Oct-24	4	0	4
Nov-24	2	0	2
Dec-24	1	0	1

2.4 Bus Movements

2.4.1 The Examining Authority has requested that the Early Year bus movements, both direct and from the Park and Ride sites following their completion, to/from the MDS prior to the Sizewell link road being available for use, are included within the HDV movements. The number of bus



movements required has been assessed based on the number of workers forecast to be on site during that period.

- 2.4.2 The workforce profile suggests there will be around 2,000 construction workers by Q4 of 2024 (Year 2 of Early Years), which is about 25% of the peak construction workforce. With 520 bus movements assessed at peak construction (northern and southern park and rides and direct buses), if all direct buses and both park and ride sites were operational there could be around 130 bus movements (65 each way) on the B1122 in the Early Years just prior to the Sizewell link road being operational. The revised HGV profile issued at D7 made allowance for 130 two-way bus movements per day on the B1122.
- 2.4.3 It is currently forecast that the Park and Ride schemes will be complete in Q2/3 of 2024, therefore the above number of bus movements have been included in the HDV profile with a phased increase from May 2024 to make allowance for the early utilisation of the park and rides as they are completed.
- 2.4.4 Local bus movements from the LEEIE (ACA) Park and Ride to the TCA which do not route along the B1122 are not included in the bus movements shown in Figure 1.

2.5 SLR construction movements

- 2.5.1 The delivery strategy for the SLR seeks to minimise the number of SLR construction vehicles that require access along the B1122 in parallel to the MDS construction vehicles by establishing a haul road along the trace of the SLR. This will allow the distribution of deliveries along the SLR without the need to travel on the B1122.
- 2.5.2 The Sizewell link road haul route will be available following the completion of the East Suffolk line overbridge, which is currently forecast for Q4 year 1, through to the completion of the main Sizewell link road alignment. The haul road will during this period be used for the distribution of Sizewell link road imported construction materials along the Sizewell link road, accessing from the A12, and also to move cut and fill, 'mass balance', material within the Sizewell link road, from the Sizewell link road to the main development site and from the two village bypass to the main development site. These 'mass balance' movements will commence after the ESL bridge and haul route is available.
- 2.5.3 The expected deliveries to the Sizewell link road for imported construction materials will not exceed the 200 HGV two-way movements/100 daily deliveries that has been assessed. These will generally access the Sizewell link road directly off the A12 roundabout onto the Sizewell link road. There



will be a small proportion of deliveries that need to access the south-east end of the Sizewell link road prior to the availability of the East Suffolk Line overbridge and haul route. These would therefore travel along the B1122 from the commencement of the Sizewell link road construction until the availability of the haul route (i.e. Jan 2023 to Nov 2023). An average of circa 40 two-way HGV movements/20 deliveries has been forecast in the HGV profile, which are included in the HDV profile.

- 2.5.4 Following the completion of the East Suffolk Line overbridge and Sizewell link road haul route these vehicles can be diverted off the B1122, however a reduced allowance of 20 two-way movements/10 deliveries has been maintained in the HGV profile to allow for any smaller deliveries that may use the B1122.
- 2.5.5 The 'mass balance' movements from the SLR and TVBP to the MDS stockpiles will not occur until the haul route is available therefore minimising the number of the larger HGVs, GVW 18-44t, travelling on the B1122. These movements will access the SLR haul road off the A12 and along the SLR haul route, exiting back onto the B1122 at the south-east tie in, then entering into the MDS. These HGVs will follow the same route when exiting after from the MDS. The profile of these movements hashas been smoothed and levelled slightly to ensure the efficient use of the plant and HGVs, i.e. to maintain a relatively constant fleet size of vehicles.

2.6 Summary

- 2.6.1 The HGV caps in the Early Years and main construction period have impacted the delivery programme due to the volume of works that can be undertaken and the required volume of HGV deliveries / movements required to support the level of construction activity.
- 2.6.2 In the Early Years, prior to the project rail and marine infrastructure, road import is the sole means of delivering material to site. It therefore is a direct constraint on the programme. The development of the programme was founded on the available HGV import capacity to ensure that the HGV caps were not exceeded. Some discrete exceedances were expected and these will be managed and levelled through the DMS system, so that the project stays within the caps.
- 2.6.3 The delivery programme has continued to develop to balance the number of HGVs and delivery of works to maintain the critical path of the programme with some other non-critical programme activities being able to move to fill low points in the HGV forecast. While this can be undertaken to a small degree the erosion of any float (i.e. time contingency before there would be an impact on the critical path) needs to be carefully considered so as not to introduce additional risk of delay to the project.

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- 2.6.4 The additional HGV movement requirements for water tankers has been able to be accommodated in the existing caps by further levelling the HGV profile and adjusting non-critical activities to later in the programme (Year 2) when there is a lower HGV requirement due to the use of rail for the import of bulk materials.
- 2.6.5 The bus movements fall into this period also due to the date of completion of the Park and Ride schemes.
- The HDV profile for the Early Years, Figures 1 and 2, therefore demonstrate 2.6.6 that the project can be delivered within the existing caps and that these caps are reasonable and not overly generous.

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Figure A: Smoothed HGV profile from [REP7-071] paragraph 1.9.2

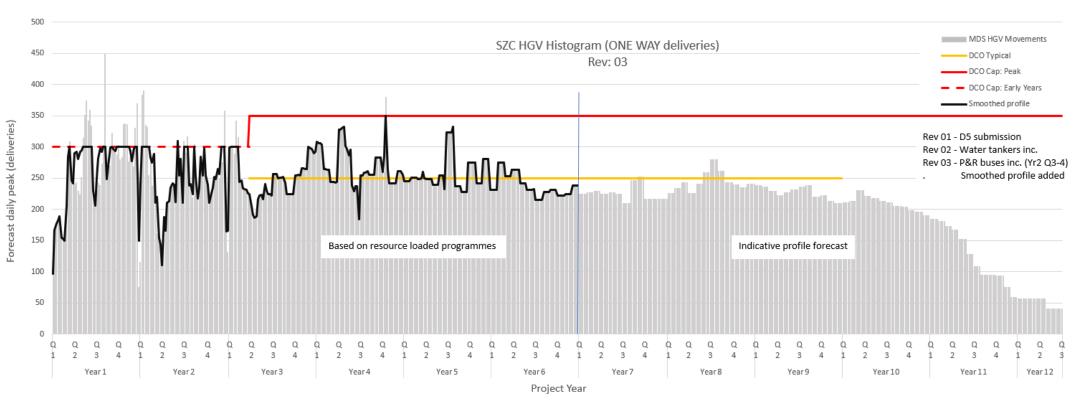
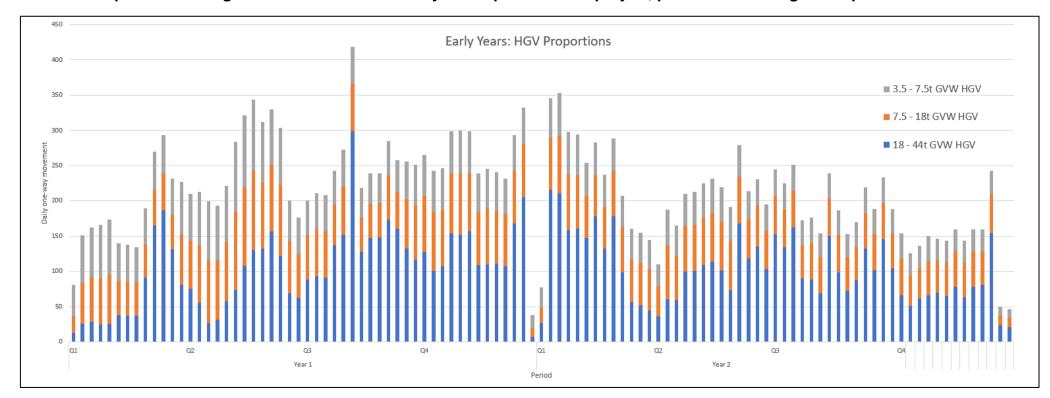




Figure B: Material Imports and Modal Split [REP5-114] Figure 1 - Early Years HGV Proportions

The HGV profile showing the HGV sizes for the Early Years period of the project, prior to smoothing of the profile





ANNEX A HGV PROFILE SPREADSHEET

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	YEAR																2	022																1
	YEAR #																Ye	ar 0																ĺ
	QUARTER						Q2										(Q3											Q4					
	MONTH		Apr-	22		Ma	ay-22	2		Ju	n-22			lul-22	2		Au	g-22			Sep	-22			Oct	-22			Nov-2	22		Dec-	22	1
	w/c	04/04/2022	11/04/2022	18/04/2022	02/05/2022	09/05/2022	16/05/2022	23/05/2022	30/03/2022	13/06/2022	20/06/2022	27/06/2022	04/07/2022	11/0//2022 18/07/2022	25/07/2022	01/08/2022	08/08/2022	15/08/2022	29/08/2022	05/09/2022	12/09/2022	19/09/2022	26/09/2022	03/10/2022	10/10/2022	24/10/2022	31/10/2022	07/11/2022	14/11/2022	21/11/2022	05/12/2022	12/12/2022	19/12/2022 26/12/2022	
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SZC B1122 Movements (capped to 300)	•									_	, ,				1													1					1	-
MDS Construction Movements*		20	55	55 5	55 55	55	55	55	55 7	7 7	7 77	77	77	77 7	7 77	77	77	81	81 8	1 88	87	85	85	95	95 9	95 95	98	122	124 1	125 11	130	160	152 91	Ĺ
Tanker Movements (MDS only)		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	5	5	5 5	5 5	5	5	5	5 5	5	5 5	<u>;</u>
Buses**		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0	0	0 (0	0	0	0	0 0	0	0 ()
SLR Construction Movements (B1122)		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0	0	0 (0	0	0	0	0 0	0	0 ()
Total		20	55	55 5	55 55	55	55	55 !	55 7	7 7	7 77	77	77	77 7	7 77	77	77	81	81 8	1 88	87	85	85	100 1	.00 10	00 100	103	127	129 1	130 12	.2 135	165	157 96	j
																																		_
DCO HGV Cap (Early Years)		300	300	300 30	300	300	300	300 3	00 30	30	0 300	300	300	30	0 300	300	300	300 3	00 30	0 300	300	300	300	300 3	300	300	300	300	300 3	300 30	300	300	300 300)
SZC Non B1122 Movements																																		
Off-site AD Tankers		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0	0	0 (0	0	0	0	0 0	0	0 ()
SLR Haul Road Movements		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0	0	0 (0	0	0	0	0 0	0	0 ()
Vehicles by size																																		_
GVW: 18-44t		0	0	11 :	11 11	. 11	11	11	11 1	7 1	7 17	17	17	17 1	.7 17	17	17	18	18 1	8 18	18	17	17	17	17 :	17 17	7 17	17	17	17 1	18	18	18 18	3
GVW: 7.5-18t		0	35	28 2	28 28	28	28	28	28 3	9 3	9 39	39	39	38 3	8 38	38	38	41	41 4	1 44	44	43	43	48	48	48 48	3 49	61	62	63 5	65	80	76 46	j
GVW: 3.5-7.5t		20	20	16	16 16	16	16	16	16 2	2 2	2 22	22	22	22 2	2 22	22	22	23	23 2	3 26	26	25	25	30	30	30 30	32	44	45	45 4	11 47	62	58 28	3
Buses (GVW: 7.5-18t)		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0	0	0 (0	0	0	0	0 0	0	0 0)
MDS Water Tankers (GVW: 18-44t)		0	0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	5	5	5 !	5 5	5	5	5	5 5	5	5 5	;

^{* -} Including accomodation campus and the LEEIE

^{** -} Includes direct and P&R buses

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		2023	3	
		Year 1	1	
	Q1	Q2	Q3	Q4
	Jan-23 Feb-23 Mar-23	Apr-23 May-23 Jun-23	Jul-23 Aug-23 Sep-23	Oct-23 Nov-23 Dec-23
	1 2 3 4 5 6 7 7 8 9 10 11 12 13 13 13 13 13 13 13 13 13 13 13 13 13	3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/2003 00/10/
SZC B1122 Movements (capped to 300)				
MDS Construction Movements*	62 132 143 147 154 121 119 116 171 250 266 212 207	27 248 250 239 250 252 258 258 258 258 258 258 258 188 164 21	11 243 259 253 261 261 209 230 260 254 251 247 254	252 252 252 252 252 252 252 252 252 245 230 260 262 262 136
Tanker Movements (MDS only)	14 14 14 14 14 14 14 14 14 14 14 14 14 1	14 22 22 22 22 22 22 22 22 22 22 22 22 22	19 19 19 19 19 19 19 19 19 26 26 26 26	5 28 28 28 28 28 28 28 28 28 28 28 28 28
Buses**		0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	
SLR Construction Movements (B1122)	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 10 10 4
Total	96 166 177 181 188 155 153 150 205 284 300 246 241	41 290 292 281 292 294 300 300 300 300 300 300 230 266 25	50 282 298 292 300 300 248 269 299 300 297 293 300	300 300 300 300 300 300 300 293 278 298 300 300 150
DCO HGV Cap (Early Years)	300 300 300 300 300 300 300 300 300 300	00 300 300 300 300 300 300 300 300 300	00 300 300 300 300 300 300 300 300 300	300 300 300 300 300 300 300 300 300 300
SZC Non B1122 Movements				
Off-site AD Tankers	1 1 1 1 1 1 1 1 1 1 1 1	1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	11 11 11 11 11 11 11 11 11 11 11 11 11	. 9 9 9 9 9 9 9 9 9 9 9 9
SLR Haul Road Movements				
Vehicles by size				
GVW: 18-44t	3 16 18 15 16 28 27 27 81 155 172 122 71	71 78 55 20 30 54 56 77 89 101 115 95 54 48 8.	85 98 104 136 139 186 117 136 154 145 145 115 105	108 90 95 118 116 120 101 96 92 98 129 151 31
GVW: 7.5-18t	30 65 71 73 76 57 56 54 55 58 58 56 79	79 99 116 129 129 116 120 108 102 95 91 104 90 78 8	84 95 101 78 83 55 63 64 70 75 72 89 100	97 109 105 92 93 91 102 101 94 103 87 70 79
GVW: 3.5-7.5t	49 71 74 80 82 56 56 55 55 57 56 55 78	78 90 100 111 111 102 102 93 87 82 71 79 64 59 6.	62 69 73 59 59 40 50 50 55 55 55 63 69	66 74 72 62 63 61 69 68 64 69 56 51 30
Buses (GVW: 7.5-18t)	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0
MDS Water Tankers (GVW: 18-44t)	14 14 14 14 14 14 14 14 14 14 14 14 14 1	14 22 22 22 22 22 22 22 22 22 22 22 22 22	19 19 19 19 19 19 19 19 19 26 26 26 26	28 28 28 28 28 28 28 28 28 28 28 28 28 10

^{* -} Including accomodation campus and

^{** -} Includes direct and P&R buses

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Iui <u> </u>						
				2024		
				Year 2		
		Q1	Q2		Q3	Q4
	Jan-24	Feb-24 Mar-24	Apr-24 May-24	Jun-24 Jul-24	Aug-24 Sep-24	Oct-24 Nov-24 Dec-24
	25 01/01/2024 95 08/01/2024 95 22/01/2024 96 23/01/2024	05/02/2024 12/02/2024 19/02/2024 26/02/2024 29 04/03/2024 29 11/03/2024 11/03/2024	25/03/2024 01/04/2024 01/04/2024 15/04/2024 22/04/2024 06/05/2024 22/05/2024 22/05/2024 22/05/2024	27,027,027,027,027,027,027,027,027,027,0	05/08/2024 12/08/2024 19/08/2024 26/08/2024 26/09/2024 68 09/09/2024 69 16/09/2024 69 16/09/2024	07/10/2024 14/10/2024 14/10/2024 21/10/2024 28/10/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024 26/11/2024
L	33 34 33 30 37	38 33 00 01 02 03 04	03 00 07 08 09 70 71 72 73 7	74 73 70 77 78 73 80 81 82 83	84 83 80 87 88 83 30 31 32	93 94 93 90 97 98 99 100 101 102 103 104 103

SZC B1122 Movements (capped to 300)

Tanker Movements (MDS only) 20 32							200	0 210	, 144	134	120	197	1/3	220	222	235	242	230	202	260	224	240	161	225	225	225 18	33 17	159	225	187	153	160	209 1	179 2	23 1	79 16	4 136	5 146	160	177	174	190	181	225 22	25 225	5 90	0 9
Tanker Movements (MDS only) 20 32	32	32	32	0	0 0) (0 (0 0	0	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 () () (0	0	0	0	0	0 0	0 ()
Buses** 0 0	0	0	0	0	0 0) (0 (0 0	0	C	0	0	0	0	0	10	10	20	20	30	40	50	60	65	65	65 6	55 6	65	65	65	65	65	65	65	65 (65 6	5 65	65	5 65	65	65	65	65	65 6	65 65	5 6	5 f
SLR Construction Movements (B1122) 6 10	10	10	10	10 1	.0 10	10	0 10	0 10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10 1	10	10	10	10	10	10	10	10 :	10 1	0 10	10) 10	10	10	10	10	10	10 10	0 10	J 1
Total 240 300 3	300	300	300	300 28	3 275	289	9 210	0 220	154	144	130	207	185	230	232	255	262	260	232	300	274	300	231	300	300	300 25	58 25	1 234	300	262	228	235	284 2	254 2	98 2	54 23	9 21:	1 221	1 235	252	249	265	256	300 30	00 300	0 16	5 1 <i>E</i>

DCO HGV Cap (Early Years)	300 300 300 300 300 300 300 300 300 300

SZC Non B1122 Movements

Off-site AD Tankers	5 5	5	5 5	5 5	5	5 5	5	5	5 5	5	5	5	5	5	5 !	5 5	5	5	5	5	5	5	5	5 5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3 3	3 3	3 3	3	3	3	3	3
SLR Haul Road Movements	24 29	29 2	9 56	56	56 5	6 70	75	75 7	5 75	75	75	75	75 5	5 5	0 30	30	25	30	30		70 7	0 6	9 6	69	69	69	69	35	0	0	0	0	0	0	0	0	0	0	0 (0 (0 0	0	0	0	0	0

Vehicles by size

CIII	icics by size																																																		
	GVW: 18-44t	49	144	137	119	122	174	178	154	179	100	77	52	45 4	13 6	7 67	7 109	110	111	116	96	66	140	98	108	48	99	90 1	04 5	50 4	4 26	99	54	28	39	84	53 9	7 5	66 1	.8	2 13	17	21	16	30	17	38	41	78	10	8
	GVW: 7.5-18t	87	72	77	88	86	72	59	68	63	65	84	60	58 5	51 8	4 70	71	1 72	. 78	80	85	86	79	82	88	76	84	89	81 8	88 8	7 89	85	89	84	80	83	34 8	84 8	32 9	4 8!	5 85	91	99	101	102	104	110	108	88	56 5	,7
	GVW: 3.5-7.5t	84	52	54	62	60	55	46	53	48	45	59	42	41 3	37 5	6 49	50	51	. 55	56	58	59	51	53	54	47	52	55	50 5	55 5	4 54	51	53	51	51	52	52 5	52 5	61	ر 2 51	3 58	61	66	67	68	70	87	86	69	34 3	<i>i</i> 5
	Buses (GVW: 7.5-18t)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 () (0	10	10	20	20	30	40	50	60	65	65	65 6	65 6	5 65	65	65	65	65	65	65 6	55 6	55 6	5 6!	65	65	65	65	65	65	65	65	65	65 6	5
	MDS Water Tankers (GVW: 18-44t)	20	32	32	32	32	0	0	0	0	0	0	0	0	0	0 () (0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0

^{* -} Including accomodation campus and

^{** -} Includes direct and P&R buses