



The Sizewell C Project Case Team
National Infrastructure Planning
sizewellc@planninginspectorate.gov.uk
(By email only)

2 June 2021

Planning Inspectorate Reference: EN010012
Our Identification Number: 20025459

Dear Sir or Madam,

Planning Act 2008 – Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

Deadline 2 Submission

On 24 June 2020, the Marine Management Organisation (the “MMO”) received notice under section 55 of the Planning Act 2008 (the “PA 2008”) that the Planning Inspectorate (“PINS”) had accepted an application made by NNB Generation Company (SZC) Limited (the “Applicant”), for determination of a Development Consent Order for the construction, maintenance and operation of the proposed Sizewell C Nuclear Power Station (the “DCO Application”).

Since then, the Applicant submitted a request to make fifteen changes to the original DCO Application, and these changes were accepted by the Examining Authority (“ExA”) on 21 April 2021.

The Applicant seeks authorisation for the construction, operation, and maintenance (“O&M”) of the DCO Application, comprising of two nuclear reactor units, together with associated onshore and offshore infrastructure and associated development (the “Project”). The marine elements of the Project include a cooling water system comprised of intake and outfall tunnels, a combined drainage outfall in the North Sea, a fish return system, two beach landing facilities, and sections of the sea defences that are, or will become, marine over the life of the project. These marine elements fall within a Deemed Marine Licence (“DMLs”) with is under Schedule 20 of the DCO.

The MMO received a Rule 8 letter on 21 April 2021. In response to this letter, the MMO submits the following:

1. **Summary of MMO’s Written Representation**
2. **Written Representation**



3. Comments by registered Interested Parties only on any updated application documents and Changed Application documents
4. Responses to comments on Relevant Representations (“RRs”)
5. Comments on any additional information/submissions received by D1
6. Responses to any further information requested by the ExA for this Deadline *(this is submitted as a separate document)*
7. Responses to the ExA’s Written Questions (ExQ1) *(this will also be submitted within the template as a separate document alongside this submission)*

The MMO is in discussion with the applicant in relation to the comments in the MMO’s Relevant Representation [RR-0744]. The MMO has entered into a Statement of Common Ground with the applicant that will be submitted to the ExA by the applicant on the MMO’s behalf at Deadline 2.

This written response is submitted without prejudice to any future representation the MMO may make about the DCO Application throughout the examination process. This representation is also submitted without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

Yours faithfully,



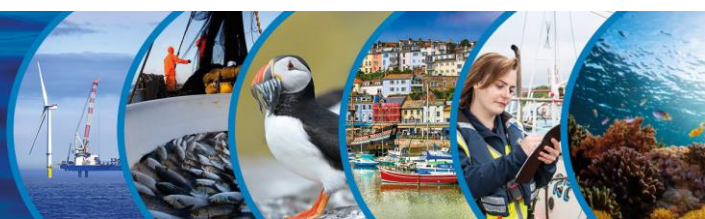
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1. Summary of MMO's Written Representation ("WR")

Development Consent Order ("DCO") and Deemed Marine Licence ("DML")

- 1.1 The MMO's previous concerns [RR-0744] regarding the Arbitration process in Part 7, Article 82 of the DCO have been resolved as the MMO will no longer be subject to the Arbitration process.
- 1.2 The MMO's concerns [RR-0744] regarding the inclusion of Unexploded Ordnance ("UXO") clearance activities in the DCO and DML have been resolved, as the UXO clearance works have been removed and will be consented via a separate Marine Licence.
- 1.3 The MMO still has major concerns regarding the Appeals Procedure outlined in Schedule 20A of the DCO and request this procedure is removed.
- 1.4 The MMO has major concerns regarding the "determination dates" stated in the conditions in the DML and request this process is removed. The MMO should not have a set deadline to make a determination on any submissions. The MMO does not delay determinations without necessity.
- 1.5 The MMO have concerns about the timeframes stated within the DML conditions for the submission of documents. The MMO considers the timeframes stated are too short, and that a 6-month lead time prior to commencement of works would be more realistic to avoid any delays to the project timeline.
- 1.6 The MMO, East Suffolk Council and the Applicant are in discussions regarding how the Coastal Processes Monitoring and Mitigation Plan ("CPMMP") should be placed in the DCO and DML.
- 1.7 The MMO has asked for clarity regarding the licenced activities in the DML and advises that the maximum parameters for all project elements must be stated on the DML in line with the Environmental Statement ("ES").
- 1.8 The MMO has asked for a number of changes to the wording of the DML conditions. Additionally, further discussions with MMO stakeholders are required to agree that the level of detail provided in the DML conditions is adequate.
- 1.9 The MMO has asked for all mitigation to be secured via DML conditions. In particular, navigational safety mitigation, a Marine Mammal Mitigation Protocol ("MMMP"), Southern North Sea Special Area of Conservation ("SAC") Site Integrity Plan ("SIP"), and a Comprehensive Impingement Monitoring Programme ("CIMP").

Harbour Powers in the DCO



- 1.10 The MMO seeks a number of clarifications from the Applicant regarding the Harbour Powers that are included in Part 6 of the DCO.
- 1.11 The MMO notes that the confirmation of byelaws is a process undertaken by the Secretary of State – this is a Department for Transport (“DfT”) function, and the confirmation of byelaws should be checked with the DfT policy team.
- 1.12 The MMO also advise that the potential need for a Justice Impact Test on the new offences within this DCO is discussed with the Ministry of Justice.

Environmental Statement – Marine Ecology and Fisheries

- 1.13 The MMO largely supports the assessments on impacts to fish populations for the most part but there are two areas where the MMO consider further information should be supplied. The MMO advises that a further sensitivity analysis is undertaken to examine the effectiveness of the Low Velocity Side Entry (“LVSE”) design and the Fish Recovery and Return (“FRR”) system. The MMO advises that additional evidence in relation to Acoustic Fish Deterrent (“AFD”) options is provided. For example, while an optimal sound field may require a large number of sound projectors, it is unclear whether a functional system could be established using fewer sound projectors. A specific assessment of the feasibility of installing and operating AFD at SZC should be provided.

Environmental Statement – Coastal Geomorphology and Hydrodynamics

- 1.14 The MMO notes that there could be geomorphic impacts from the capital and maintenance dredging required at the permanent Beach Landing Facility (“BLF”) and recommends that this is monitored via the CPMMP. The MMO advises that additional surveys are undertaken 3 months and 6 months after the initial capital dredge to monitor this.
- 1.15 Additionally, the MMO requests that the overall bathymetry of the banks are surveyed annually for the duration of the construction phase to monitor any changes to the outer longshore bar.

Environmental Statement – Marine Water Quality and Sediments

- 1.16 The MMO have asked for clarity from the Applicant regarding the use of ammonia and the justification for the values used for hydrazine.

Environmental Statement – Marine Navigation

- 1.17 The MMO aims to review the Written Representations submitted by the Maritime and Coastguard Agency (“MCA”), Trinity House, the Inshore Fisheries and Conservation Authority (“IFCA”), and fishing organisations to determine the significance of any impacts to current fishing grounds and navigational safety.

Other Documents



1.18 The MMO advises that a Marine Plan Policy Assessment is undertaken by the Applicant to evidence that the project is compliant with the relevant Marine plans.

Shadow Habitats Regulations Assessment (“HRA”)

1.19 The MMO defers to Natural England as the Statutory Nature Conservation Body (“SNCB”) regarding matters relating to the HRA. However, the MMO do have a series of minor comments on the shadow HRA [APP-145-152] and [AS-173] that we have asked the Applicant to address outlined within our Statement of Common Ground.

2. MMO’s Written Representation (“WR”)

The MMO has entered into a Statement of Common Ground with the Applicant that will be submitted by the Applicant on the MMO’s behalf at Deadline 2. The MMO notes that this document contains every detailed comment the MMO has on the DCO Application. These comments are summarised below.

2.1 Development Consent Order (“DCO”) - [AS-144]

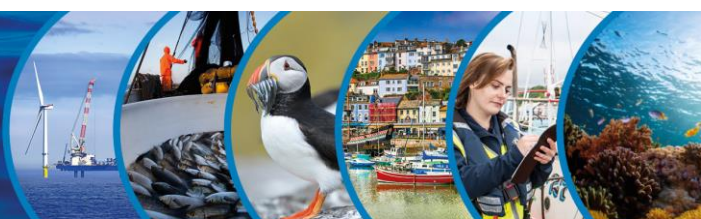
Arbitration

2.1.1 The MMO’s concerns about the arbitration process outlined in Part 7, Article 82 have been resolved as the DCO now outlines that this process will no longer apply to the MMO.

Appeals

2.1.2 The MMO has major concerns about the “Procedure for approvals, consents and appeals” contained within Schedule 20A. This proposes a new enhanced Appeals procedure for the Applicant should the MMO refuse an application for approval under a condition, or fail to determine the application for approval by certain “determination dates” which have been inserted into the DML in Schedule 20. This is not available for other marine licence holders. The MMO strongly requests that the appeals procedure for the MMO, and the “determination dates”, are removed from both the DCO and DML.

2.1.3 Appeals are already available to the Applicant in the form of an escalated internal procedure and judicial review (“JR”), and therefore, including any additional appeal mechanism for the MMO within the DCO and DML is unnecessary. The Marine Licensing (Licence Application Appeals) Regulations 2011 apply a statutory appeal process to the decisions that the MMO makes regarding whether to grant or refuse a licence or conditions which are to be applied to the licence. However, they do not include an appeal process to any decisions the MMO is required to give in response to an application to discharge any conditions of a marine licence issued directly by us. Therefore, if the DCO were to be granted with the proposed appeal process included, this would not be consistent with the existing statutory processes. This amendment would be introducing and making available to this specific Applicant, a new and enhanced appeal process which is not available to other marine licence holders, creating an unlevel playing field across the regulated community. The



MMO has explained within our Relevant Representation [RR-0744] that these proposals go against the statutory functions laid out by parliament. The MMO's previous comments within RR-0744 on the appeals route remain.

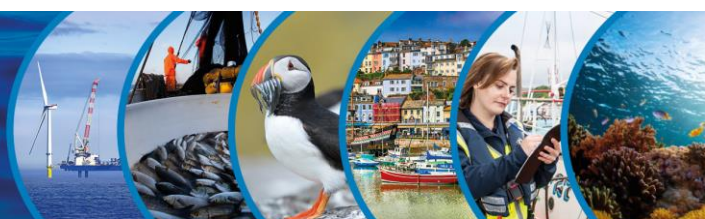
2.1.4 In addition to this, the MMO emphasises that we are an open and transparent organisation that actively engages, and maintains excellent working relationships with, industry and those it regulates. The MMO discharges its statutory responsibilities in a manner which is both timely and robust in order to fulfil the public functions vested in it by Parliament. The scale and complexity of Nationally Significant Infrastructure Projects creates no exception in this regard and indeed it follows that where decisions are required to be made, or approvals given, in relation to these developments of significant public interest only those bodies appointed by Parliament should carry the weight of that responsibility. Since its inception the MMO has undertaken licensing functions on over 130 DCOs, comprising some of the largest and most complex operations globally. The MMO is not aware of an occasion whereby any dispute which has arisen in relation to the discharge of a condition under a DML has failed to be resolved satisfactorily between the MMO and the applicant, without any recourse to an "appeal" mechanism.

2.1.5 The MMO further draws attention to the position on Norfolk Vanguard Offshore Wind Farm DCO. The ExA recommendation on Schedules 9 to 12, Part 5 – procedure for appeals concluding in paragraph 9.4.42 is outlined as follows:

"There is no substantive evidence of any potential delays to support an adaptation to existing procedures to address such perceived deficiencies. To do so would place this particular Applicant in a different position to other licence holders."

2.1.6 Similarly, the Hornsea Three Offshore Wind Farm ExA Recommendation report states under the 'Alternative dispute resolution methods in relation to decisions of the MMO under conditions of the DMLs' section, in paragraphs 20.5.27 – 20.5.29:

"We agree with the MMO on this point. The process set out in the Marine Licensing (Licence Application Appeals) Regulations 2011 does not cover appeals against decisions relating to conditions. Whilst it would be possible to amend those regulations under PA2008, the result would be to create a DML which would be different to other marine licences granted by the MMO. We recommend that the Applicant's alternative drafting in Articles 38(4) and 38(5) is not included in the DCO. (...) We have commented above that the scale and complexity of the matters to be approved under the DMLs is a strong indicator that those matters should be determined by the appropriate statutory body (the MMO). In our view an approach whereby matters of this magnitude would be deemed to be approved as a result of a time period being exceeded would be wholly inappropriate. Notwithstanding the exclusion of European sites, this approach would pose unacceptable risks to the marine environment and navigational safety. We recommend that the Applicant's alternative drafting is not included in the DCO."



2.1.7 There is no compelling evidence as to why the Applicant in the case of Sizewell C should be an exception to the well-established rules and treated differently to any other Marine Licence holder.

Unexploded Ordinances

2.1.8 The MMO's concerns about the inclusion of UXO clearance works within the DCO and DML have been resolved. The UXO works have now been removed from the DCO and DML and will be consented via a separate Marine Licence should they be required.

Interpretations

2.1.9 In relation to the "Interpretations" in Part 1, Article 2, the MMO advises that the Applicant provide a definition for both "onshore" and "offshore". Clarification is required on whether offshore means "beyond 12 nautical miles " or just "not on land". The MMO advise that the DCO incorporates all the definitions within its "Interpretation" (and that the DML includes all those relevant to the DML within its own "Interpretation" section). We advise that both "interpretation" sections should mirror each other by having the same definitions.

2.1.10 The MMO also requests clarity on the definition of "commence". Capital dredging is included in the works and so it would be useful to ensure that this is not excluded from definition of "commence". Additionally, the Applicant should clarify if "commence" includes each phase of a licensed activity.

Jurisdiction

2.1.11 There are ongoing discussions taking place with East Suffolk Council, MMO and the Applicant to determine how the soft Coastal Defence Feature ("sCDF") and the Coastal Processes Monitoring and Mitigation Plan ("CPMMP") should be secured in the DCO and DML.

Vertical Deviation

2.1.12 In relation to Part 2 Article 4 (1)(a), the MMO notes that "the undertaker may deviate vertically to any extent found necessary or convenient". This allows marine structures to deviate vertically to any extent found necessary or convenient. The MMO outline that there should be maximum limits on horizontal and vertical deviations in line with what has been assessed in the Environmental Statement ("ES").

Authorised Development

2.1.13 In relation to Schedule 1 "Authorised Development", the final DCO/DML authorised development should be cross referenceable with the project description and final Environmental Impact Assessment ("EIA"). The DCO/DML authorised development should be clearly linked to the "Worst Case Scenario" as outlined within the EIA and



it should be clear that the works will be built within the scope of the ES. Currently the “Worst Case Scenario” dimensions are not always stated.

2.1.14 We advise that rock protection (anti-scour protection) and disposal should be listed in "other associated development" as they are currently not included.

Mitigation Documents

2.1.15 The MMO notes there will be ongoing engagement with the Applicant and other Interested Parties to ensure that key mitigation documents are all captured within Schedule 2, “Requirements”. Currently, Requirement 3 should be amended to clarify that this requirement is for the Onshore Written Scheme of Investigation (“WSI”), as there will be a separate marine WSI required under the DML conditions. Additionally, we note that Requirement 7A states that the CPMMP will be approved by the MMO. MMO advises that East Suffolk Council may also need to approve the plan for any works within their remit and not in MMOs (mainly the monitoring and mitigation for the Coastal Defence Features).

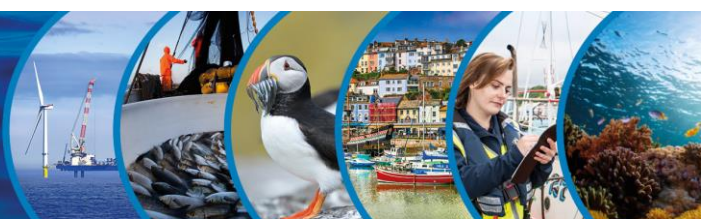
Explanatory Note

2.1.16 MMO advises that the Explanatory Note should refer to where maps of the project can be accessed, both in hard copy and in electronic form.

2.2 Harbour Powers within DCO- [AS-144]

General comments that require clarity from the Applicant

- 2.2.1 In relation to the Explanatory Memorandum [AS-146], the application of paragraph 32 is not clear. The MMO would expect “changing the powers of a harbour authority” to more closely relate to Section 14 of the of the Harbours Act 1964 (“HA 1964”) , under Schedule 2 (objects for which a Harbour Revision Order (“HRO”) can be achieved) when a HRO is sought to vary or abolish powers and duties of an existing harbour authority. As we understand the position, the Applicant is seeking a Harbour Empowerment Order (“HEO”) to create a harbour authority, and therefore are not changing any powers. We note that the Explanatory Memorandum has a footnote entry “3” in 8.2 however, there is no corresponding footnote at the bottom of this page, which may or may not shed some light on the matter.
- 2.2.2 Although the decision on the harbour powers sought in the DCO will be a matter for the ExA, the MMO recommends that the Applicant clarifies which objects in Section 16 to the HA 1964 are to be achieved and how these objects meet the ‘tests’ or requirements in S16(5) of the HA 1964.
- 2.2.3 It is noted that the expression “marine works” is used throughout Part 6 of the DCO [AS-144] and is defined in the interpretation section as the marine works described in Schedule 1. However, in Section 57 (interpretation) of the HA 1964, “marine work” is defined as a “harbour or boatslip in Scotland”. Other DCOs, and recently made Harbour Orders use the expression “tidal works” which means “so much of any work authorised by this order as is on, under, or over tidal lands below the level



of high water”. It would assist the MMO to understand the reason for the departure from the use of “tidal works” in Part 6.

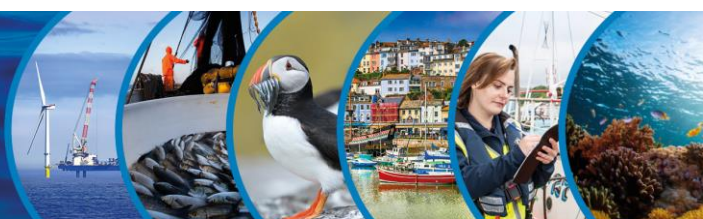
- 2.2.4 The MMO advises that the Applicant confirms if they seek the requisite powers to be conferred as a harbour authority, or is it intended that these be conferred on a designated person or a body corporate?
- 2.2.5 The MMO advises that the Applicant clarifies what constitutes the “harbour” over which the newly constituted harbour authority will exercise jurisdiction, for instance it should be clarified which specific works relate to the construction of a “harbour”.
- 2.2.6 The MMO emphasises that the limits of the harbour should be very clear. The instrument should stipulate over which area the newly constituted harbour authority will have jurisdiction to enable the harbour authority to exercise their powers of general directions and byelaws.
- 2.2.7 The MMO advises that the Applicant clarifies if the “harbour” is intended to be temporary or permanent. Additionally, if it is proposed that any temporary structures will be dismantled after completion of the project.
- 2.2.8 The MMO notes that the draft DCO appears to create new offences. The MMO has received guidance from the Ministry of Justice (“MoJ”) that when considering harbour orders which create new offences, a Justice Impact Test must be carried out and submitted to the MoJ for their approval. As the Justice Impact Test is a requirement for Harbour Orders, the MoJ may require this to be done for a DCO that creates new offences. The MMO would currently advise that PINS contact the MoJ to discuss whether a Justice Impact Test will be required for the new offences within this DCO.

Comments on the Harbour Powers contained within Part 6 of the DCO - [AS-144]

Article 46

- 2.2.9 The MMO query the requirement for the inclusion in Article 46(9) of: “All fines and forfeitures recoverable under the provisions of the 1847 Act as incorporated within this Order may be recovered summarily”. The fines recoverable under the 1847 Act are all specified in the body of the provisions as level 3 or 4 fines on “summary conviction”.
- 2.2.10 Clarification is required as to who is intended to be appointed as the harbour authority, and therefore become the body responsible for the harbour? Currently the “undertaker” appears in the interpretation section at the start of the DCO: “undertaker” means NNB Generation Company (SZC) Limited (company number 09284825) or any person who has the benefit of this Order in accordance with articles 8 (Benefit of Order) and 9 (Consent to transfer benefit of Order).

Article 52



2.2.11 The MMO have not seen the application of the Marine and Coastal Access Act 2009 (“MACAA”) within a provision in a harbour order before and therefore advises that the Applicant provides context with reference to a similar provision in a DCO. The MMO would also highlight whether this provision is better placed within the DML.

Article 55

2.2.12 The MMO would like to clarify that a Harbour Authority wishing to undertake dredging in line with their powers to dredge, qualifies as an exempt activity under MACAA, and as such, a marine licence would not need to be sought. Should the DCO contain this provision, then the Applicant would not require a marine licence for the dredging that falls under these powers. The MMO wish to outline that this raises issues with how this could interact with the EIA and wider DCO and DML consent. However, the MMO notes that the dredging activities are already covered within the DML, and that the request for these powers within Part 6 of the DCO is an unnecessary duplication.

Article 58

2.2.13 The MMO queries why there is no penalty against the undertaker for failing to comply with the provisions of Article 58(a) and (b). It is usual to find “lights on works” provisions accompanied by the following provisions:

“(2) If the Undertaker fails to comply in any respect with a direction given under this article, it will be guilty of an offence and liable on summary conviction to a fine and on conviction on indictment to a fine.

(3) It will be a defence for the Undertaker to prove that all due diligence was used to secure compliance with any such direction.”

Article 59

2.2.14 As in comment 2.2.13 above, the MMO queries the absence of a penalty against the undertakers for failing to comply with the provisions of Article 59, for example:

“If the undertaker fails to comply with paragraphs (x), it is guilty of an offence and liable—

*on summary conviction, to a fine; or
on conviction on indictment, to a fine.”*

It will be a defence for the Undertaker to prove that all due diligence was used to secure compliance with any such direction.

Article 60

2.2.15 As with comments 2.2.13 and 2.2.14 above, the MMO queries the absence of a penalty against the undertakers, for example:



“If the Undertaker fails to comply in any respect with a direction given under this article, it will be guilty of an offence and liable on summary conviction to a fine and on conviction on indictment to a fine.”

It will be a defence for the Undertaker to prove that all due diligence was used to secure compliance with any such direction.

Article 61

2.2.16 The MMO advises that the Applicant considers moving provisions relating to the provision of a “Scheme” monitoring movement of vessels (relating to the works authorised by the DCO) to the DML.

Article 64

2.2.17 We advise that as the confirmation of byelaws is a process undertaken by the Secretary of State, this is a Department for Transport (“DfT”) function and the procedures set out in this provision should be checked with the DfT policy team.

2.2.18 It is noted that a copy of the byelaws are to be made available at the office of the harbour master for public inspection, however, the MMO advises that accessibility is considered. The MMO recommends having these available online (with a weblink in a footnote). Additionally, the MMO queries if it is necessary to charge for them.

Article 65

2.2.19 The MMO advises that the Applicant considers amending the title to insert “Power to make...” Before “general directions to vessels”. In addition, the current provision at (3) “Before giving a direction, or revoking or amending a direction...”. This provision as currently drafted does not meet the requirements for a formal procedure for the giving, amending or revoking of a general direction. For example, see Article 5, Newport, Isle of Wight HRO 2021/139 by way of example of the process required. We advise that the applicant considers inserting a new provision after Article 65.

2.2.20 In addition, the MMO advises that the Applicant considers inserting in the place of “Before giving a direction ...” “(3) The undertaker must keep and make available at its harbour office and on its website a public register of all in force general directions.” This provision is to ensure accessibility of the directions to members of the public/harbour users.

2.2.21 The MMO queries the inclusion in 65(1)(a) “routes or channels in the harbour and the approaches to the harbour” as general directions can be used only within the specified limits over which the harbour authority is to have jurisdiction. The above may be outside of that area.

Article 66



2.2.22 See Statutory Instrument (SI) 2021/139 for an example of a recently made order containing provisions relating to the publication of general directions. The provisions provide clear time periods as to when the notices should be displayed, require the notice to be published on the harbour authority's website and in newspapers circulating in the locality of the harbour, as they are more likely to be seen by persons local to the harbour. The MMO query the inclusion of Lloyds List. The addition of a requirement to place notices in the harbour is to ensure that harbour users are aware of the general direction, as non-compliance could lead to a criminal conviction.

2.2.23 In relation to 66(1), MMO queries why it is necessary for a copy of the general direction to be bought. This is not a provision commonly seen in harbour orders in relation to general directions. A paper copy is usually made available for inspection at the harbour master's office or the harbour authority's principal office or is available to view on the harbour authority's website.

2.2.24 Section 40A of the HA 1964 in relation to Harbour Directions makes a provision for a charge (and requires the giving of the harbour direction to be published in a specialist shipping newspaper, such as Lloyds List) however, Harbour Directions are very different to general directions.

2.2.25 MMO advises that the Applicant reviews legislation.gov.uk for orders made by DfT in relation to Harbour Directions:
<https://www.legislation.gov.uk/ukxi/2017/279/made>.

Should the applicant require these powers, an application must be made to DfT.

Article 67

2.2.26 The MMO queries the authority for special directions to be given on "the approaches" to the harbour and whether this is within the area of jurisdiction. We advise that the Applicant considers whether 67(1)(a) second line "made in or under a general direction" should read "special direction". The Newhaven HRO 2016/151 is relied upon as having a similar provision; however it does not appear in Article 7.

Article 68

2.2.27 The MMO advises that the Applicant considers amending the heading to "Master's responsibility in relation to directions" to make the position clear to the reader.

Article 69

2.2.28 The MMO advises that the Applicant considers amending "The master of a vessel" to "A person who fails to comply with" which widens the scope for enforcement purposes, rather than limiting it to the master of a vessel. In addition, the Applicant could consider separating the provision into two parts to provide clarity on the penalty for non-compliance and the availability of a defence in criminal proceedings. See SI 2021/139 Article 8 for a recently made provision in this regard.



Article 70

2.2.29 In Article 70(3), the MMO advises that the Applicant considers adding “Reasonable” prior to “expenses” in the line with other provisions in the DCO. In addition, the Applicant could consider whether (2) “reasonable inquiry has been made” is sufficiently clear. Additionally, the Applicant should consider whether the provision at 70(2) complies with the Home office powers of entry code of practice: <https://www.gov.uk/government/publications/powers-of-entry-code-of-practice>.

2.2.30 The MMO advises that the Applicant considers Article 9 in example SI 2021/139, which provides for the powers of entry to be exercised 48 hours after giving of the special direction (except in an emergency) to ensure compliance with the above code of practice.

Article 71

2.2.31 As above, the MMO advises that the Applicant checks that these provisions comply with the code of practice on powers of entry, as in comment 2.2.29 above. The MMO specifically advises that the Applicant clarifies if the powers of entry derived from the 1847 Act are incorporated into this order, or already provided for in existing legislation?

Article 73

2.2.32 Regarding the Beach Landing Facilities (“BLFs”), the MMO recognises that one is intended to be temporary. The jetty in the Hinkley DCO 2013/648 has a closure provision (see Article 82 which specifies a closure date). The MMO suggests that the Applicant should provide clarity on which parts of the project require the use of the Beach Landing Facilities, and if there is an intention, following completion of specific elements of the project are completed, for the beach landing facility/jetty to be dismantled?

2.3 Deemed Marine Licence (“DML”)

Timeframes for submitting documents

2.3.1 The MMO has major concerns about the timeframes for the submission of documents as detailed in the DML conditions. The MMO advises that a 6-month lead period prior to the commencement of activities, would be more appropriate to allow sufficient time for the MMO to review the submissions and resolve any issues. This is for the MMO to approve the finer details before the works start, which the applicant can’t provide during the application and examination process, so it’s necessary for the MMO to have enough time to properly scrutinise those documents. How long that takes will depend on factors such as the quality of the plans submitted in the first instance, the MMO resource available, the level of consultation required, and how long consultees need to respond in a meaningful way. The MMO does not delay determinations without necessity. The MMO considers that submitting plans and protocols 6 months prior to the commencement of activities is a realistic timeframe to prevent causing any delays to the Applicant’s



project delivery timeframe. MMO advises that the DML conditions that require submission of plans and protocols are amended to state that documents will be submitted at least 6 months in advance of the relevant works commencing.

- 2.3.2 In relation to the timescales, the MMO strongly disagrees with the inclusion of “determination dates” in the DML conditions, after which the Applicant proposes that they may submit an appeal for non-determination. See comments 2.1.2 – 2.1.7 above for details on why the MMO does not agree with this procedure. However, to summarise, we emphasise that if MMO delay unduly there are already existing routes to challenge this via our internal complaints system or via judicial review, and MMO do not set determination timescales in condition sign offs within standalone Marine Licences and DMLs should be as consistent as possible with standalone licences.

Coastal Defence Features

- 2.3.3 The MMO supports that the Hard Coastal Defence Feature (hCDF) has been removed from the DML, as it will be located above Mean High Water Springs (“MHWS”) which is outside of the MMO’s jurisdiction. However, the MMO notes that a portion of the footprint of the Soft Coastal Defence Feature (sCDF) is likely to be below MHWS. There are ongoing discussions with East Suffolk Council, the MMO and the Applicant to determine how the sCDF should be placed in the DCO and DML. We are also in discussions regarding the best approach for the CPMMP which contains monitoring and mitigation relevant to both MMO and East Suffolk Council’s jurisdictions.

Maximum Parameters

- 2.3.4 The MMO advises that the maximum parameters for each licenced activity must be stated within the DML. For example, the maximum parameters for scour protection, and the maximum dredging and disposal volumes (per year) must be set out in the DML rather than applied for at a later date. The maximum design parameters for the BLFs and other marine structures, including the parameters of the BLF grillage, should be outlined within DML, in line with what was assessed within the ES.
- 2.3.5 In relation to Part 2, Article 4 (2)(a)(i) the MMO advises that the term “approximately” is not accurate enough to be enforceable, and a maximum diameter would be more appropriate. This comment applies throughout Article 4 (2). MMO request that a worst-case scenario for pile diameter is provided within the DML, and this applies throughout the DML when “approximate” is used. The DML should state “no greater/ larger than X”, in line with the maximum designs assessed within the ES. Although the detailed design can be approved post consent, the maximum, worst case scenario parameters assessed within the ES must be secured within the DML.

Licensed Activities



- 2.3.6 The MMO notes that the description of “licenced activities” in Part 2, 4(1) is very wide. These activities should at least be limited to the extent of the authorised development as was assessed in the ES/ Habitats Regulations Assessment (“HRA”), and it should be clearly stated within this description.
- 2.3.7 Additionally, Part 2, 5 is very wide. It suggests that the Applicant can carry out any licensable marine activity that they want to under the general headings in Part 2, 5(a) to (e), and only (f) is currently limited to the extent assessed in the ES. These activities should all be limited to the extent assessed in the ES.
- 2.3.8 The MMO notes that normally the DCO in Schedule 1 would describe the works packages in detail and then the DML would repeat what those descriptions are in Part 2, 4(2) for the marine licensable works. However, the descriptions in Schedule 1 are quite vague. The MMO need to be confident that the descriptions in the DML, in this expanded format, do not go beyond what is to be authorised under the main consent order. The MMO requests that the Applicant sets this out clearly to the MMO so that we can be clear that the descriptions within the DML are in line with the works packages authorised by the main order.
- 2.3.9 In relation to Part 2, 4(2)(b)(v) which details the licensable activities involved in the construction of the temporary BLF, the MMO requires more clarity from the Applicant on what the “additional supporting works” will involve.
- 2.3.10 The MMO cannot locate any pre-construction monitoring/surveys in the “licenced activities” section (Part 2). For example, the removal of sediment samples for environmental monitoring. Samples that involve removal of more than 1 cubic metre of material are licensable. The MMO requests that the Applicant confirms if there will be any licensable pre-construction monitoring or surveys. For example, related to *Sabellaria* investigations, dredging and disposal.
- 2.3.11 Part 3, 47 (2) mentions the disposal of tunnel boring equipment. The MMO requests clarity from the Applicant on what equipment is being referred to here, and why it should be disposed of in the marine area and not on land at a proper disposal facility. All disposal activity must be assessed against the Waste Hierarchy, and disposal at sea is only suitable in limited circumstances.

Interpretations

- 2.3.12 The MMO advises that the definition of “commence” in Part 1, Article 1 (1), “Interpretation” should include more detail to clarify exactly which works will be excluded from this definition. The introduction in the DCO states this does not include:

- (a) *site preparation and clearance works;*
- (b) *pre-construction archaeological works;*
- (c) *environmental surveys and monitoring;*

The MMO advise that if this will apply to the marine works as well, this should be stated in the DML definition.



2.3.13 The MMO does not agree with the definition of “maintain” on the basis that any maintenance should be limited by what was assessed in the ES/Habitats Regulations Assessment (“HRA”). The definition should state that maintenance can only be undertaken to the extent identified and assessed in the ES.

Scour Protection

2.3.14 The MMO notes that “anti-scour” protection will be placed around the Cooling Water Infrastructure, Combined Drainage Outfall, and Fish Return and Recovery System. The MMO should be provided details of the need, type, sources, quantity, distribution and installation methods for any rock/scour protection. This should be conditioned on the DML. These details could be provided in a scour protection plan post consent, however, the worst case maximum scenario volume of scour protection to be used should still be stated on the DML.

Underwater Noise

2.3.15 The MMO notes that impact piling may be required for the construction of the BLFs. The MMO requires that all mitigation that will be implemented to reduce noise impacts is stated on the DML. Currently the piling mitigation seems to be spread out within the DML (Condition 24 states the mitigation for piling, and Condition 40 states that a noise risk assessment will be provided). The MMO requests whether this could be streamlined into one section of the DML by grouping conditions together so that all mitigation related to piling is easily viewed in one place.

2.3.16 The MMO welcomes that a draft Marine Mammal Mitigation Protocol (“MMMP”) has been provided, however the condition that stated a MMMP will be provided to MMO for approval has been removed from the DML. As all relevant mitigation must be stated on the DML, the MMO requests that a condition is added which states that an MMMP will be submitted to the MMO for approval prior to works commencing.

2.3.17 Furthermore, as the application proposes impact piling within the Southern North Sea Special Area of Conservation (“SAC”), a Site Integrity Plan (“SIP”) will need to be submitted to, and approved by, the MMO before the commencement of any construction activities that could affect the integrity of the Southern North Sea SAC. This follows a review of consents undertaken by the Secretary of State for the Department for Business Energy and Industrial Strategy alongside the MMO. More information can be found at:

<https://www.gov.uk/government/collections/marine-licensing-nationally-significant-infrastructure-projects>. The SIP must demonstrate that the project either alone or in combination with other plans or projects, will not exceed the noise thresholds assessed within the Special Area of Conservation Review of Consents Habitats Regulations Assessment. Again, there should be a condition on the DML to state that this will be provided to the MMO. The MMO advises that the Applicant reviews Condition 26 in the DML for the East Anglia Two Offshore Wind Farm project for drafting advice. The DML can be found in REP8-0004 in the East Anglia Two Offshore Windfarm Examination Library:

<https://infrastructure.planninginspectorate.gov.uk/wp->



content/ipc/uploads/projects/EN010078/EN010078-001676-East%20Anglia%20Two%20Examination%20Library.pdf.

Condition Wording

2.3.18 The MMO notes that further discussions with stakeholders are required to agree that the level of detail provided in the DML conditions is adequate. The MMO will be reviewing the Written Representations that are submitted at Deadline 2 to identify any potential changes that may be required, and will also be contacting stakeholders to discuss this. The MMO will provide any relevant updates on this in our future responses.

2.3.19 MMO notes the wording in many conditions that documents will be submitted to MMO after consultation with certain stakeholders. For example, Part 3, Condition 20 (1) states:

“The undertaker must, after consultation with the Eastern Inshore Fisheries and Conservation Authority (EIFCA), submit to the MMO for approval a Fisheries Liaison and Coexistence Plan”

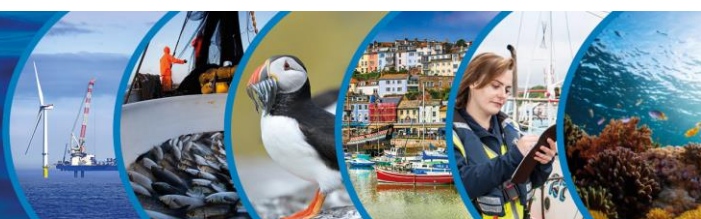
It would be hard for the MMO to enforce that IFCA, or other stakeholders, must be consulted by the Applicant prior to submission. The MMO would usually control consultation on a document with any stakeholders that we saw fit, so the DML conditions should be worded differently. There is no barrier to the applicant seeking advice from a stakeholder prior to submission to help negate the risk of issues arising during the MMO consultation. The MMO would prefer the following wording:

“The licensed activities or any part of those activities must not commence until a Fisheries Liaison and Coexistence Plan (FLCP) covering the period of construction and operation has been submitted to and approved in writing by the MMO, in consultation with the Eastern IFCA. The plan must include:...”

2.3.20 The MMO notes that the statement in Part 3, 8 is not correct and MMO do not see the purpose of its inclusion. MACAA sets out that it is an offence for a person to make a false statement or a misleading statement about a material particular for the purpose of obtaining a licence under section 89. Where such statements are made it does not render the licence invalid (can't be relied on) it allows the MMO to suspend, revoke or vary that permit under section 72 of MACAA. The provisions are set out in MACAA and the MMO advises that they do not need to be repeated here, particularly if they are repeated inaccurately.

2.3.21 In relation to Part 3, 10, the MMO notes that all approvals from the MMO should be in writing. The conditions should read that "...is submitted to and approved in writing by the MMO". This applies throughout the licence conditions where approvals are required.

2.3.22 Part 3, 48(1)(c) states that the location and design of the Fish Recovery and Return system will only be "in general accordance with the [Environment Agency] reports".



The MMO's preference is that this condition states the location and design will be "in accordance with the Environment Agency reports". The MMO notes that there is a caveat that can be added to the condition to state "unless otherwise agreed in writing by the MMO". This would enable flexibility for it to be agreed at a later date that the location and design did not need to be in accordance with those reports.

Navigational Safety

2.3.23 The MMO notes that Articles 58-61 in Part 6 of the DCO "Harbour Powers", relate to lighting and Aids to Navigation. All navigational safety mitigation for the marine area should be secured via conditions on the DML. The MMO advises that there could be an "Aids to Navigation" section on the DML where all conditions for lighting and aids to navigation could be stated in one place. The MMO have standard navigational safety conditions for inclusion within DML's that have been agreed with Trinity House and Maritime and Coastguard Agency ("MCA"). The MMO will send these conditions to the Applicant so that they can be included within the DML. Additionally, the MMO advises that MCA and Trinity House should review any lighting and aids to navigation DML conditions to ensure that they are appropriate for this project.

2.3.24 Part 2, 4(2)(g)(vi) states that permanent navigational marker buoys will be installed in relation to the Cooling Water Infrastructure. The MMO advises that there should be engagement with Trinity House to agree on the appropriate Aids to Navigation, and this should be stated as a condition on the DML.

2.3.25 In relation to Part 3, 33, which details the procedure for any lost or misplaced rock or sediment, the MMO advises that this condition should not include "or move it to a location where it poses no risk to navigation". MMO requests that this condition is removed because in this situation the standard dropped object procedure, as detailed in Part 3, 32 of the DML, should be followed.

Dredging

2.3.26 The MMO notes that further discussions with the Applicant are required regarding the dredging conditions in the DML (Part 3, Conditions 35-37). As stated earlier, explicit maximum volumes and depths of dredging must be stated on the DML, in line with those assessed within the ES, and the type of dredging (capital or maintenance) and disposal site should also be stated.

2.3.27 Additionally, pre and post dredge bathymetrical surveys are required, and this should be stated within the DML. The pre-dredging bathymetric survey should be carried out within a three-month period prior to the proposed dredging. The post-dredge survey should be carried out as soon as practical after the completion of the dredging, usually immediately or within a few hours (account will be taken of delays caused by issues such as adverse weather conditions or lack of access to the berth). The MMO will review bathymetric surveys to confirm that the dredging has been carried out in line with the licensed dredge depth, area and within acceptable volume limits. The MMO require that the bathymetric survey is provided on a chart



(provided digitally) showing the licensed dredge area and dredge depth. This will allow the MMO to efficiently confirm that the licence requirements have been met. This should be discussed further with the MMO to identify when and how often these surveys should be undertaken given the regular maintenance dredging that will take place. We also advise that longer term monitoring of the dredged areas is undertaken via the CPMMP.

Sabellaria Monitoring Plan

2.3.28 In relation to Part 3, Condition 46, the MMO requests that the Applicant adds “(4) demonstration of how the project design reduces the loss of reef, and surrounding area available for reef to develop into, as far as practicable” as part of the details that must be provided within the Sabellaria Monitoring Plan.

2.3.29 The MMO notes that further discussions are required with Natural England and the Applicant to determine what information should be provided for Sabellaria Monitoring and any mitigation requirements.

2.3.30 Condition 46 states that the Sabellaria Monitoring Plan will be submitted at least 6 weeks prior to commencement of works on the Cooling Water Intake and Outfall Heads, Shafts and Tunnels. This time frame is too short to allow the MMO to adequately review this plan which relates to a sensitive and protected feature. Again, the MMO recommends that this plan should be submitted at least 6 months prior to commencement of works.

Maintenance Activities Plan

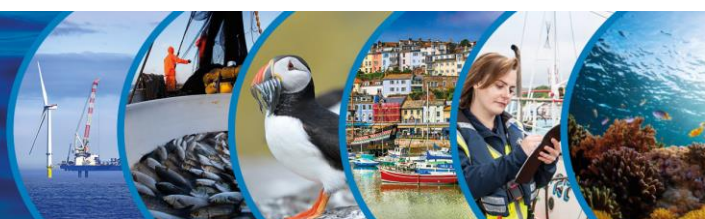
2.3.31 The MMO advises that an “in-principle” Maintenance Activities Plan (“MAP”) should be submitted and agreed in examination, which outlines the maintenance works that are planned to take place under the DML. The MAP which is submitted to the MMO post consent will then contain the finer details of the maintenance works and should be in line with the in-principle plan. It should be written into the DML condition (Part 3, Condition 35) that the MAP will be in accordance with the in-principle plan. This applies to all monitoring and mitigation plans that are required.

Comprehensive Impingement Monitoring Programme (“CIMP”)

2.3.32 The MMO advises that preparation and agreement of a detailed CIMP should be a DML condition. The MMO notes the Applicant proposes this in the Marine Ecology ES Chapter [APP-317]. In addition to the monitoring stated in paragraph 22.12.29 of APP-317, the CIMP should also include monitoring of survival of fish through the Fish Return and Recovery (“FRR”) system and enable monitoring of long-term changes in impingement as a result of climate change.

2.4 Environmental Statement

Chapter 20 – Coastal Geomorphology and Hydrodynamics [APP-311]



2.4.1 The MMO notes that there could be geomorphic impacts from the capital and maintenance dredging that is required at the permanent BLF. The continued maintenance of this area through dredging could degrade the inner longshore bar. The Applicant states that ploughed sediment will disperse due to the wave conditions, however the MMO have concerns that some of the coarser sediment could remain where it is ploughed to. This could result in a bed feature with potential to alter the near shore wave conditions. This is more likely to be a risk due to the capital dredge, or for the first maintenance dredge in advance of the season of operations. The MMO recommends the outcome of the initial capital dredge is monitored. If it can be confirmed that all of the material disperses then the issue can be considered dealt with. The MMO advises that additional surveys 3 months and 6 months after the initial capital dredge should be undertaken to monitor this. This would be part of the CPMMP, and so please also see our comments in section 3.3 below.

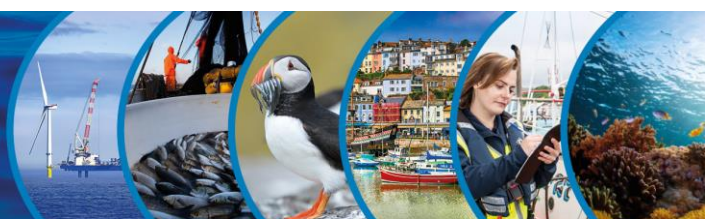
Chapter 21 – Marine Water Quality and Sediments [APP-314]

2.4.2 The MMO have asked for the Applicant to confirm what is meant by “combined sources or ammonia” in section 21.3 of this chapter (APP-314), and to clarify the ranges of baseline data that will be provided. Additionally, in p.21.6.37, ammonia is said to be “rapidly used” in the marine environment and the MMO have asked the Applicant to define the word “rapidly” in the context of likely impacts. The Applicant has informed the MMO that this information has been provided in an “Erratum” to this chapter. The MMO have reviewed the additional submission '6.3 Volume 2 Main Development Site Chapter 21 Marine Water Quality and Sediments - Revision 2.0' [AS-034] but cannot locate the “Erratum”. The MMO requests that the “Erratum” should be provided to MMO to review.

2.4.3 The MMO also notes that this chapter does not provide justification for the values used for hydrazine. The MMO would have preferred this chapter to provide more explanation of the values or reference the related synthesis report where this can be found. This is important as the basis of the assessment of the impact of hydrazine is made on the choice of these acute and chronic Predicted No Effect Concentrations (“PNECs”).

Appendix 21E - Marine Water and Sediment Quality Synthesis TR306 [APP-315]

2.4.4 Similarly, the MMO notes that within this Appendix (section 4.3.1) there is a narrative description of the expected sediment footprints from the dredging associated with the installation of the cooling water intake and heads. However, there is no description of how these findings were determined, no details of the modelling, and no graphical or tabular results. Comments are made that the peak concentrations could be more than 2000 milligrams per litre (mg/l), but are short lived. In this section, it is implied that the sediment plumes and associated deposition do not result in significant impact, however it is difficult to determine the basis of the findings based on the evidence presented in this report. The Applicant

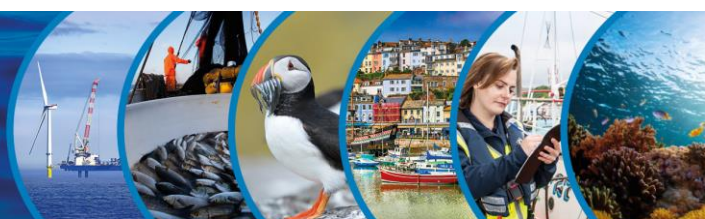


notes this can be found in a different report (TR480), but the MMO did not find this clear.

- 2.4.5 In section 7.2.3 potential thermal barriers to fish migration are discussed. The reference to the BEEMS standard for thermal barriers in an estuary is referred to several times in the report, however it is the MMO's view that this is not applicable at the site which is coastal water. We advise that the Applicant discusses this further with us.
- 2.4.6 In section 5.4.1 there is no discussion about the selection of the locations of the outfall and intakes. In reviewing the sections on the operational impacts, it would have been useful to know whether the outfall and intake layout used in the assessments has already been optimised to minimise the environmental impact. A view of the reason for the positioning of the Cooling Water Intake and Outfall would be beneficial in the ES, even if only to exclude alternatives.

Chapter 22 – Marine Ecology and Fisheries [APP-317]

- 2.4.7 In relation to the scale of assessment, the MMO notes that the Applicant continues to justify the use of the International Council for Exploration of the Sea ("ICES") stock areas as using the best available evidence. The MMO concludes that the use of ICES stock areas for commercial fish species represents the current best scientific evidence available. There is currently no robust information that would support use of more local stock areas in the assessment. The percentage impact on a stock increases in proportion to the decrease in stock area/size used (the stock area/size is the denominator in the impact calculation). Thus, a ten-fold reduction in the stock area/size used results in a 10-fold increase in estimate impact.
- 2.4.8 However, the MMO do advise that additional sensitivity analysis is required for demersal species in relation to the effectiveness of the Low Velocity Side Entry ("LVSE") design and Fish Recovery and Return ("FRR") system. See details on this in our comments in Section 3.2 below.
- 2.4.9 In relation to p.22.8.215, the MMO acknowledges that fish in active migration may not avoid the ensonified area and therefore the assessment considers the worst-case scenario in terms of disruption to migratory pathways for fish. However, the MMO would find it helpful for the assessment to provide additional context by taking account of mean swimming speeds and determining the period of exposure within the various mortality/recoverable injury/ temporary threshold shift ("TTS") impact zones. The Applicant has stated that they will provide a report containing this information (TR538), the MMO is still awaiting this report.
- 2.4.10 In relation to Appendix 22I - Sizewell C Impingement Predictions Based Upon Specific Cooling Water System Design (TR406) [APP-326] the MMO notes that a specific assessment of the feasibility of installing and operating Acoustic Fish Deterrent ("AFD") at SZC should be provided in this Appendix. While an optimal sound field may require a large number of sound projectors, it is unclear as to whether a functional system could be established using fewer sound projectors. The



Applicant states they will provide a report to the MMO regarding this. The MMO is still awaiting this report.

Chapter 24 – Marine Navigation [APP-337] and [AS-239]

2.4.11 The MMO aims to review the Written Representations that are submitted by MCA, Trinity House, the Inshore Fisheries and Conservation Authority (“IFCA”), and any fishing organisations to determine the significance of any impacts to current fishing grounds and navigational safety.

2.5 Other Application Documents

Marine Plan Policy Assessment

2.5.1 The Applicant should demonstrate that they have considered whether the project adheres to all the relevant marine plans and policies in the area. The MMO recommends that this is presented in a single, coherent document instead of a number of separate references throughout the submission. This could be submitted as a stand-alone Marine Plan Policy Assessment document. The relevant marine plan policies that should be met can be identified using the Explore Marine Plans tool and policy information on the following website:
<https://www.gov.uk/guidance/explore-marine-plans>.

Habitats Regulations Assessment

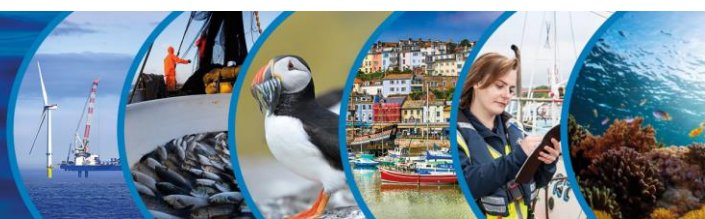
2.5.2 The MMO defers to Natural England as the Statutory Nature Conservation Body (“SNCB”) regarding matters relating to the HRA. However, the MMO do have a series of minor comments on the shadow HRA [APP-145-152] and [AS-173] that we have asked the Applicant to address. Our comments are listed in the Statement of Common Ground submitted by the Applicant at Deadline 2.

3. Comments by registered Interested Parties only on any updated application documents and Changed Application documents

3.1 ES Addendum Volume 1, Chapter 2 – Main Development Site [AS-181]

Coastal Geomorphology

3.1.1 The changes to the revised permanent BLF (Change 2) will result in an increase in the risk of effects on the outer longshore bar due to the increase in capital dredging into the Outer Bar, and resultant increased maintenance dredging. This is noted in AS-181, and it is stated that injection methods may be used to keep the grillage clear of infilled sand. The MMO notes that there is an increased risk of interrupting the sediment transport pathway for the Outer Bar without a well thought out sediment management plan. The sediment management plan is not fully detailed yet but the MMO recognises that this will be agreed via the CPMMP. Additionally, the MMO advises that further monitoring surveys to monitor the risk of changes to



the longshore bar due to the permanent BLF should be required via the CPMMP (see our comments in section 3.3 below). Ongoing discussions are required relating to agreement of the CPMMP.

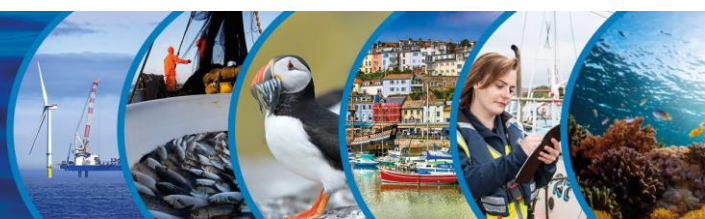
- 3.1.2 The MMO agrees that the addition of the temporary BLF (Change 2) is unlikely to have significant effects on the shoreline. However, effects close to the structures are likely, as more piles will result in more areas of scour. The MMO recognises that scour caused by the BLF piles will be monitored via the CPMMP. Additionally, the MMO advises that there is a risk of barges and tugs operating at low water depths close to the Outer Bar, and so advises that management of the timing of access is important to mitigate this risk. As above, there are ongoing discussions required relating to the CPMMP.

Marine Water Quality

- 3.1.3 The MMO notes that a revised programme of dredging will be required in relation to Change 2. The Applicant states within AS-181 that the additional dredging required will be similar or less than previously assessed for the BLF, and that dredging was assessed as having only a short-term impact, and no longer-term impact on suspended solids concentrations. Therefore, the Applicant concludes that the revised dredging for the BLF will also have no significant long-term impacts. The MMO agrees with this conclusion in relation to marine water quality.
- 3.1.4 The MMO agrees with the Applicant's conclusions within AS-181, that due to the infrequent discharge of groundwater via the temporary outfall, there will not be any significant increases in suspended sediment concentration ("SSC") as a result of the introduction of a temporary surface water outfall (Change 8). The MMO notes that cross referencing the surveyed sediment distribution presented here to that used in the BLF modelling [PDB-010] would help back up the assumptions used in the modelling study [PDB-010].

Underwater Noise

- 3.1.5 The MMO notes that there will be an increase in underwater noise caused by the additional piling for construction of the two BLFs (change 2). Although a number of assumptions and modelling outputs of the updated underwater noise assessment are clearly presented in the ES Addendum, no details are provided on the underwater noise model and input parameters that have been used. The Applicant should confirm if these are the same or if it is any different to what was used for the original ES. Additionally, section 2.2.57 mentions 25 small bore piles, but no further information provided, the Applicant should clarify the pile dimensions and installation methods.
- 3.1.6 The potential underwater noise effects of any mechanical cutting that might be required during the decommissioning of the temporary BLF have not been assessed. The Applicant should confirm that these activities will not generate any potential elevated levels of underwater noise that could affect marine fauna.



- 3.1.7 The cumulative effects assessment relating to the combined piling scenario is not clear. No model outputs or evidence are provided to support the statement that the combined effects are less than the worst-case scenarios for individual piling. The Applicant should clarify the worst-case piling scenario (potentially 4 piles being installed concurrently) and provide model evidence to support the assessment.
- 3.1.8 Table 2.44 States that cumulative (24 hour) effects are reduced due to sequencing and maximum 2 piles per day. However, the pile diameter of the dolphin/fenders and hammer energy has increased so evidence should be clearly presented to support this statement.
- 3.1.9 In relation to Table 2.59, the underwater noise from the cutting of any piles and dolphins that are not possible to be removed by vibropiling during the decommissioning process (as per P288, s2.17.22) has not been assessed. The Applicant should clarify what levels of underwater noise might be generated by these mechanical cutting activities and confirm if they have the potential to result in an effect on marine fauna.

Impacts to fish

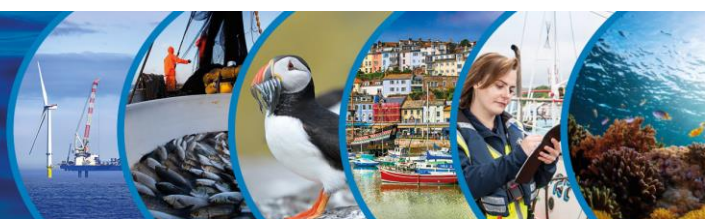
- 3.1.10 Paragraphs 2.17.3 and 2.17.4 reference updates that have been made to the assessment of impacts to fish as a result of impingement within the cooling water system. The assessment concludes that none of the DCO changes materially affect the conclusions presented in the original ES. MMO have provided comments on the new and updated fish assessment reports, see comments in section 3.2 below. While MMO consider that there are some remaining uncertainties relating to the fish impact assessment, and in some areas, a more conservative approach could have been adopted, overall, MMO do not consider that these issues materially affect the conclusions of the assessment.

3.2 ES Addendum Volume 3, Chapter 2 - Main Development Site Appendices 2.17.A - Marine Ecology [AS-238]

- 3.2.1 The MMO supports the assessments on impacts to fish populations for the most part but there are still two areas where the MMO consider further information should be supplied. The MMO advises that further sensitivity analysis should be undertaken to examine the effectiveness of the LVSE design and FRR system, see comments on Report SPP103 below. Additionally, MMO advise that additional evidence is provided in relation to AFD options, see comments on Report TR406 below.

Report SPP103 within AS-238 - Consideration of potential effects on selected fish stocks at Sizewell

- 3.2.2 MMO advises that further sensitivity analysis should be undertaken and provided within Report SPP103 [AS-238], to examine the effectiveness of the LVSE design and FRR system. The MMO supports the evidence that the Applicant has put forward in Report SPP103 [AS-238] in relation to the appropriate scale of assessment area for the 12 fish species. The MMO broadly supports the findings of

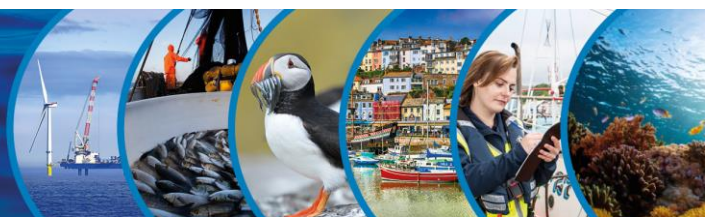


the local impact assessment which reinforces the findings of previous assessments of the potential local impacts on fish populations. The assessment is subject to the same limitations as the overall entrapment assessment (see comments on TR406 below). While the challenges of attempting to model such effects inevitably mean that there is considerable uncertainty in the assessments, the sensitivity analysis provides comfort that for key fish species (particularly pelagics that are prey resources for seabirds), local depletions will be small compared to natural interannual variation in abundance. Therefore, the MMO advises that a further sensitivity analysis should be carried out for demersal fish assuming zero effectiveness of LVSE design and FRR system. This will help to clarify uncertainties concerning potential local impact on demersal fish and their role in the local ecosystem.

- 3.2.3 In relation to Table 7 in Report SPP103 [AS-238], it should be noted that these values make assumptions about the beneficial effects of the LVSE design and FRR system for which there is limited supporting evidence. For demersal fish, local depletion within Greater Sizewell Bay + tidal excursion is estimated at 6% with mitigation in place. This includes a factor of 6 reduction for LVSE design and FRR system. If more conservative assumptions were made concerning the effectiveness of the mitigation, local depletion would be greater. Some additional sensitivity analysis relating to assumptions on the effectiveness of the mitigation would be helpful.

Report TR406 within AS-238 - Impingement predictions based upon specific cooling water system design

- 3.2.4 This report provides an updated assessment of predicted impingement impacts at SZC for key fish and shellfish species. It also provides an overall entrapment assessment, incorporating results from a separate entrainment assessment. The report also considers local-level effects on the fish assemblage at Sizewell, compliance with Water Framework Directive Regulations requirements in local waterbodies and the effect of climate change on impingement rates.
- 3.2.5 The MMO agrees that none of the changes to impingement or entrapment estimates change the conclusions in the ES.
- 3.2.6 The assessment makes assumptions about the effectiveness of the LVSE system and FRR system. There is a lack of good evidence to support these assumptions and thus the scale of benefit is uncertain, however, the MMO understands that there isn't any further work that can sensibly be done to reduce this uncertainty.
- 3.2.7 Notwithstanding these uncertainties, the entrapment estimates indicate that even in the absence of LVSE and FRR mitigation measures, only 4 species exceed the 1% threshold: bass, for which density adjustment substantially reduces assessment of impact; sand goby, for which mortality rate >1% Spawning Stock Biomass (SSB) is not a concern at population level; thin-lipped mullet, for which value is an artefact of the low level of landings and absence of SSB; and eel, for which the applied Equivalent Adult Value (EAV) of 1 is unrealistically high, and is a species most likely to benefit from the FRR. On this basis, the MMO consider there is a good

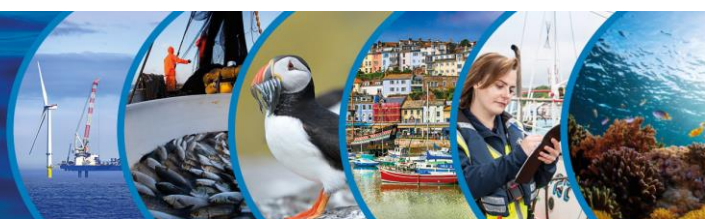


level of confidence that actual impacts to all fish species will not be significant. Therefore, the MMO support the conclusions of the ES.

- 3.2.8 There is a requirement to apply best available technology (“BAT”) in the design of the cooling water intakes and FRR system. As with Hinkley Point C there is inevitably some discussion around what might be considered feasible for offshore intakes and outfalls. The MMO advises that more evidence in relation to AFD, options should be provided before excluding them. However, while an effective AFD might further reduce impingement for some species, the absence of an AFD system should not be an impediment to consenting the project as the impacts without an AFD are not significant.
- 3.2.9 The MMO supports the conclusions of the assessments of local impacts, in relation to the Transitional Fish Classification Index (“TFCI”) local WFD waterbodies, in relation to shellfish and for climate change which have all been assessed as not significant. The MMO do not consider that any further work is required in relation to these.

3.3 Coastal Processes Monitoring and Mitigation Plan [AS-237]

- 3.3.1 The MMO agrees with the Applicant that the dredging at the BLF will cause the largest impact on Coastal Processes. The MMO notes that some impacts in the offshore region are likely. However, in the absence of a sediment transport model, the magnitude and extent of these changes is uncertain. Therefore, MMO considers that, even if only for the early stage of the monitoring programme, further surveys should be undertaken to confirm the impact assessment predictions.
- 3.3.2 The plan proposes a 1 km area (500m either side of the enhanced BLF) to be surveyed pre and post reprofiling. The MMO considers this area appropriate, however, advises that surveys of this area should be repeated three and six months after reprofiling as well. These surveys should be undertaken following the completion of the BLF dredge to confirm:
- 1) the dispersion of the dredged material which has been ploughed to the side;
 - 2) the response of the dredged slope into the outer longshore bar with any consequences for the longshore bar crest level and;
 - 3) the potential infill rate in the dredged area for the BLF.
- 3.3.3 Additionally, the plan states that the overall bathymetry of the banks will be surveyed within the background monitoring programme – i.e. once every 5 years. It is the MMO’s view that 5 years would be too long to alert the project to any unexpected changes which can occur in a dynamic marine environment, at least during the early years of the construction programme. As there is uncertainty in the response of the outer longshore bar to the maintenance of the dredged area related to the permanent BLF, the MMO advises that there should be annual surveys for the duration of the construction phase to monitor the outer longshore bar.



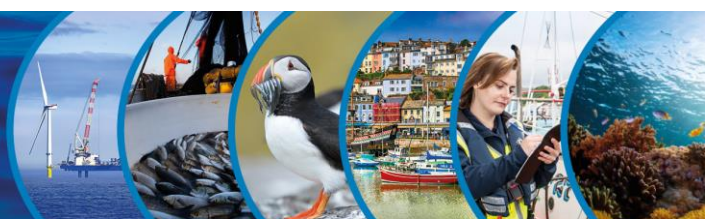
- 3.3.4 The MMO advises that section 2.2.2 of the plan should include the resolution for the monitoring surveys, and a view on the target accuracies for the surveys, horizontal and vertical, and hence a view on the uncertainty in the observed beach volume. In particular, this should include how vegetation is taken account of. Since the objective is monitoring beach volume, the implications of the anticipated accuracies for this parameter should also be described.
- 3.3.5 The MMO advises that the assumption within section 3.3 that the scour around the offshore cooling water infrastructure will reach equilibrium in 3 months is subject to uncertainty. If the 6-month survey shows scour development continuing (in depth or extent), then further surveys will be needed until the equilibrium is reached – or mitigation measures are put in place. The MMO would like this to be stated in the plan so that it is clear to future readers that further monitoring could be required after 6 months should the scour be continuing to develop.

3.4 Water Framework Directive (WFD) Compliance Assessment Report Addendum [AS-279]

- 3.4.1 The hydro morphological impacts of the revised permanent BLF and temporary BLF (change 2) reflects the assessment of minimal effects on bed shear stress. As detailed above there remains a risk of localised bed changes around the structures. However, the MMO agrees that at a water body scale the changes are minor.
- 3.4.2 The MMO notes that the risk of changes to the longshore bar due to the permanent BLF should be investigated further, although again the impacts may be small on a water body scale. This will be discussed further as part of our comments on the CPMMP.
- 3.4.3 The WFD assessment for Change 2 concludes that effects on water quality parameters are likely to be temporary and they would not result in deterioration in water body status under the WFD Regulations. The MMO notes that this conclusion seems sensible.
- 3.4.4 The initial WFD assessment screening of the Temporary Surface Water Outfall (change 8) found that the temporary discharges are not expected to impact upon the hydromorphology, physico-chemistry or biology of the coastal water body. Therefore, no further detailed WFD assessment was required for this change. This conclusion was made on the basis that the discharge would essentially be of clean surface runoff water that will be treated. Given the assessment in the ES, this conclusion also seems sensible to the MMO. The MMO defers to the Environment Agency on any further matters relating to the Water Framework Directive Regulations.

4. Responses to comments on Relevant Representations (“RRs”)

- 4.1 The MMO are continuing to review the comments on Relevant Representations submitted at Deadline 1. The MMO will provide any comments we have at a future deadline once the review is complete.



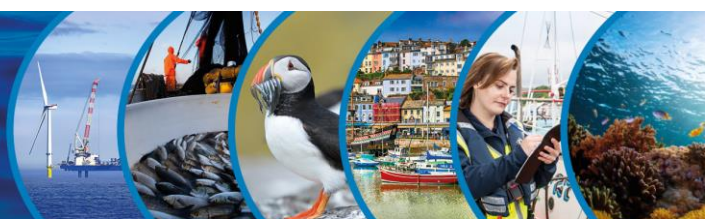
5. Comments on any additional information/submissions received by Deadline 1

5.1 Modelling of the Temporary and Permanent Beach Landing Facilities at Sizewell C, Report TR543 [PDB-010]

- 5.1.1 The conclusion of the assessment is that there will be no detectable change along the coastline. The changes in the bed stress will, however, change the sediment flux in various areas and therefore some change in bed level may occur, albeit further offshore. It is understood that the main focus of this impact assessment is the coastline and designated receptor areas, however there remains a gap in understanding the potential for effects of the BLF works on the outer longshore bar, which could have the risk of secondary effects on the coastline. This uncertainty in predicted impacts on the subtidal regions (and outer longshore bar) leads the MMO to our various comments for further monitoring as part of the CPMMP, as detailed in section 3.3 above.

6. Responses to any further information requested by the ExA for this Deadline

- 6.1 The ExA requested that the MMO update our Relevant Representation [RR-0744] to contain the document references from the Examination Library. The MMO has done this and has submitted our updated Relevant Representation to PINS separately.





7. Responses to the ExA's Written Questions (ExQ1)

7.1 MMO have submitted our responses to the ExA's Written Questions separately, in the templates provided by the ExA. However, please also see our responses inserted in Table 1 below for reference.

Table 1: MMO Responses to the ExA's Written Questions (ExQ1)

Reference	Question directed to	Question	MMO Response
G.1 - General and Cross Topic Questions			
G.1.17	The applicant, MMO	<p>Policy approach</p> <p>The Planning Statement, section 3(10)(c), paragraph 3.10.19, refers to EN-1 (paragraph 4.1.6) which states that "The IPC must have regard to the MPS and applicable marine plans in taking any decision which relates to the exercise of any function capable of affecting the whole or any part of the UK marine area. In the event of a conflict between any of these marine planning documents and an NPS, the NPS prevails for purposes of IPC decision making given the national significance of the infrastructure." Given that the decision in this case would be made pursuant to s105 PA</p>	<p>The MMO do not consider that it is within our jurisdiction to comment on such matters, and that this should be for the consideration of the decision maker. The MMO can provide comment on the appropriateness of the Applicant's Marine Plan Policy Assessment (MPPA).</p>



		2008 and not s104 PA 2008, should the NPS still prevail in the event of a conflict or is the weight to be attributed to those matters a question for the decision-maker to assess in the light of the particular circumstances of each case?	
Bio 1. Biodiversity and ecology, terrestrial and marine			
Bio 1.0	The Applicant, Natural England, MMO	<p>Please would the Applicant, NE and the MMO agree and provide a short explanatory document, with plans to bring together information on the terrestrial and marine SSSIs, SACs, SPAs, Ramsar site(s), MCZs and other non-statutory designations they consider are of relevance to this application. (If the parties disagree on which are relevant, the sites should still be included but clearly marked to show which party considers site to be relevant.)</p> <p>The information in Figures 8.2.1 – 8.2.3 of the oLEMP [APP-588] is helpful in this regard and could be used as a starting point. It however only covers the surroundings of the Main Development Site and there are some aspects not clearly labelled (see below).</p>	The MMO considers that it is for the Applicant to produce the requested document. We note that the MMO have not yet received a copy of this document/ response from the Applicant. The MMO defers to Natural England for comments on this matter, as the Statutory Nature Conservation Body (SNCB) and lead's on Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar and Site of Special Scientific Interest (SSSI) designations.



The ExA would like to have all in one place:

- (i) the spatial extent of each designated area, in relation to the others and the Application Site (if this could be done by transparent overlays capable of being read as hard copies and electronically that could be very helpful),
- (ii) the reasons for the designation of each site,
- (iii) a brief explanation for the discontinuities within some of the designations (for example why the Minsmere to Walberswick Heaths and Marshes SAC has five separate adjacent but not adjoining areas).

Some areas are designated under more than one provision. For example the Minsmere-Walberswick Heath and Marshes SSSI is also covered by a SAC, and SPA and a Ramsar designation. Are the areas co-extensive (so that the same tests apply across the whole area) or are there parts which are, say, a SAC but not a Ramsar site?

The labelling questions are as follows: (a) Fig 8.2.2:

(i) is the SSSI covering the area north of the Main Development Site boundary going north to a campsite, northwest towards Potton Halls Fields SSSI and then back south near Middleton and Eastbridge part of the Minsmere-Walberswick Heaths and Marshes SSSI?

(ii) where is the northern limit of the Sizewell Marshes SSSI? It appears to touch the area we describe in (i).



Bio 1.22	MMO	At section 4.2 of its [RR-0744] the MMO comment extensively on BEEMS TR523 – Coastal Processes Monitoring and Mitigation Plan. Please will the MMO give the examination library and full application document citation for this document.	For this document the examination library reference is AS-237, and is titled: "Additional Submission in relation to the Applicant's request for changes to the application and Additional Information - 6.14 Environmental Statement Addendum Volume 3: Environmental Statement Addendum Appendices Chapter 2 Main Development Site Appendix 2.15.A Coastal Geomorphology and Hydrodynamics"
Bio 1.38	MMO, Natural England, The Applicant	<p>(i) Please state the applicability of ss.125 and 126 of the Marine and Coastal Access Act 2009 and set out any marine conservation zones which are relevant to the Application. (The ExA note that Table 22.1 of APP-317 highlights Orford Inshore MCZ.)</p> <p>(ii) If there are any Marine Conservation Zones or ss.125 or 126 of the Marine and Coastal Access Act 2009 are otherwise engaged by the Application please set out (a) how, (b) the steps taken in relation to them and (c) the steps which the SofS should take. Please will the Applicant in answering draw attention to any provisions of the application documentation which address the question</p> <p>(iii) Please state whether or not any other provisions of the MCA 2009 are relevant and if so, how.</p> <p>(iv) Is the MMO content that there is no separate assessment for the Orford Inshore MCZ?</p>	<p>(i) and (ii) The MMO believe that this is a matter for the Applicant. The Applicant should identify whether there are any MCZs relevant to the application, and determine whether an MCZ assessment is required, in conjunction with the Statutory Nature Conservation Body. The MMO have not located an MCZ assessment as part of the application, and notes that if it is determined that it is required, that this should be completed by the Applicant. The MMO can comment on the assessment, alongside Natural England, however, ultimately, it is the ExA who must satisfy themselves that by the close of examination they have satisfied s125 and s126 in that they have discharged their general duties as a public authority. Furthermore, they must be content that they have enough information to write a recommendation to the Secretary of State.</p> <p>(iii) specifically, the MMO note that s127 and s128 are also relevant here, as they are further provisions within the Marine and Coastal Access Act 2009 (MACAA) that are relevant to assessing MCZs.</p> <p>(iv) we defer to the specialist comments from Natural England on this matter. The MMO would like to note that we have not yet received a response from the applicant on this question.</p>



Bio 1.39	MMO, EA, The Applicant	Please will the MMO and Environment Agency explain what is the split and overlap of their functions in the sea. If the ExA has understood the landward limit of MMO responsibility correctly, this question is directed to the area seaward of Mean High Water Springs.	The MMO's licensing jurisdiction is outlined by the Marine and Coastal Access Act 2009 (MACAA 2009), which provides that a marine licence is required for certain activities carried out within the UK marine area. The UK marine area is defined within section 42 of MACAA 2009, however, to clarify, it is correct that the Mean High Water Springs is the boundary of our jurisdiction. The types of activities are listed within section 66.
Bio 1.192	MMO, Natural England, The Applicant	<p>The ExA draws attention to the Inspectorate's Advice Note 11, Annex B, page 6</p> <p>(a) Is s.150 PA2008 engaged for matters in the jurisdiction of the MMO? Presumably it is at least in relation to the deemed marine licence? In relation to what others is it engaged?</p> <p>(b) Has the Applicant sought and obtained a waiver under s.150 of the PA2008 and the Infrastructure Planning (Interested Parties and Prescribed Provisions) Regulations 2015?</p> <p>(c) Does the Conservation of Seals Act 1970 apply and if so how?</p>	<p>(a) As the MMO understands, we can exercise a modicum of flexibility, in that the DCO does remove the requirement for a separate marine licence as there will be a deemed one. The MMO will comment on the drafting of the DML as the examination period progresses to ensure that it is fit for purpose, including that the conditions meet the five tests (necessary; must relate to the activity or development; precise; enforceable; reasonable) and that it can act in its capacity as a marine licence, should the DCO be granted. The MMO does not consider that that s.150 applies to Wildlife Licences. Should one be required the applicant must apply via the Marine Case Management System (MCMS). The MMO encourage early engagement with the MMO Marine Conservation Team (MCT) if this is the case.</p> <p>(b) The MMO notes that this question is for the Applicant.</p> <p>(c) The MMO defer to Natural England as specialists on this matter.</p>



Bio 1.193	MMO, Natural England, The Applicant	<p>[APP-317]] Table 22.1 In relation to the Minsmere – Walberswick SPA and Ramsar Site the Applicant writes “Likely significant effects on designated bird species are assessed as part of the Shadow HRA (Doc Ref. 5.10)” and the reader is referred there for assessment.</p> <p>This approach is taken for the assessment of effects under the EIA Regs in relation to other sites, for example the Alde-Ore Estuary SPA and Ramsar Site, the Outer Thames Estuary SPA.</p> <p>Doc Ref 5.10 is a very large report made up of multiple documents and citations are not to specific paragraphs / sections which would aid the reader.</p> <p>Is the MMO satisfied with this approach? As the approach also affects terrestrial European sites, the ExA directs this question to Natural England as well.</p> <p>Please will the Applicant explain how it considers the findings of a habitats regulations assessment should be used in the ES? For example, is it the Applicant’s view that if there is no likely significant effect (LSE) found in the Shadow HRA, then there is no LSE in terms of the ES? The tests are different as the Applicant will be aware. If there is an LSE under the HRA but there is no adverse effect on integrity of the European site where does that sit in terms of the ES?</p>	<p>The MMO would like to clarify that Natural England's remit is not solely terrestrial, they deal with, and advise on both marine and terrestrial elements. When determining marine licences, the MMO are the competent authority for undertaking Habitats Regulation's Assessments, however, we consult Natural England as lead advisors on these areas in their capacity as the SNCB. Therefore, we would defer to them as lead SNCB on this topic, across both marine and terrestrial sites.</p>
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		<p>Please will the Applicant succinctly summarise the findings of the assessment in terms applicable to the ES, giving cross-references to the HRA and Examination Library references.</p>	
<p>Bio 1.198</p>	<p>MMO, The Applicant</p>	<p>A number of points in the MMO's [RR-0743] are comments rather than clearly stated disagreements. Please will the SoCG between the Applicant and MMO address each of these, whether or not the comment is accepted, and state what action is taken as a result, and any implications for the ES or other application documentation.</p>	<p>The SOCG will clearly identify the status of the "acceptance" of these comments, alongside supporting comments.</p>



Bio 1.199	MMO	<p>Para 5.4.1.2. Please set out drafting the MMO seeks for a requirement on LVSE and FRR design, monitoring and operation, with an explanation and reasoning.</p>	<p>For clarity, the MMO's intention with this comment, was to provide a possible route for resolution. With current issues around the design and operation of these systems, the MMO noted that, as found in the Hinkley Point C (HPC) DCO, if needed these technicalities could be addressed at a later date through additions to the current DML condition - see Article 48 of the DML (Schedule 20 of the DCO). Currently, as reflected within our SOCG on the updated reports (AS-238) (and please see the SOCG for more detail), there are now only 2 areas where we consider further information should be supplied on this matter: 1- further sensitivity analysis within SPP103 to examine concerning the effectiveness of the LVSE design and FRR system; and 2- additional evidence in relation to Acoustic Fish Deterrent (AFD) options. We would further like to clarify that "requirements" within the DML are "DML Conditions" and these are separate to the requirements set out within the DCO.</p>
Bio 1.200	MMO	<p>[RR-0743] Paras 5.4.1.6 – 5.4.1.17. (a) The ExA concludes from these paragraphs that the MMO is content with the method used by the Applicant and is not requiring the Applicant, ExA or SofS to use the extended method. Please confirm (or otherwise) that the ExA has correctly understood. (b) However, para 5.4.1.6 says: “although once these analyses are completed, decision-making will still require a judgement to be made taking account of the model outputs, analogue evidence from Sizewell B monitoring, proportionality and an appropriate level of precaution”. Please will the MMO set out the decision process, with steps, documents and other factors to be taken into account, which it is here recommending to the SofS.</p>	<p>The MMO confirms that the ExA have understood correctly, and that we are content with the method used by the Applicant. The comment to which the ExA refer was judgement based on the evidence at the time, pending the provision of further analysis by the Applicant. Having reviewed this further evidence provided as part of the Environmental Statement (ES) Addendum, we are satisfied that there is no benefit in applying the extended method.</p>



		(c) Does this issue arise elsewhere in [RR-0743]? For example at para 5.8.8? If so please answer (a) and (b) for those instances also.	
Bio 1.201	MMO	[RR-0743] Para 5.5.1. This alerts the ExA to an additional source of baseline information on harbour and grey seal distributions” and gives a website. Please will the MMO explain what information in that document it wishes the ExA to take into account and explain why and with what conclusion.	The MMO were raising an additional source of baseline information on harbour and grey seal distributions for the attention of the applicant and the ExA, this was in relation to the applicants section "4.2.1 Distribution and abundance within the North Sea" on the grey and harbour seal in the document entitled "6.3 Volume 2 Main Development Site Chapter 22 Marine Ecology and Fisheries Appendix 22E - Sizewell Marine Mammals Characterisation" (examination reference: APP-322). The MMO have since closed out this comment within the SOCG following the Applicant's clarification "We note the reference with thanks. The additional information on seals would enrich the existing characterisation but it would not change the outcome of the assessments."
Bio 1.202	MMO	[RR-0743] Para 5.6.2. The MMO draws attention to Council Regulation (EU) 2019/124 which it says has been superseded. Please say what is the new regulation and explain how it makes a difference to Appendix 22f and the ES conclusions on fisheries and marine ecology.	Please see the SOCG regarding updated comments on this paragraph of RR-0743.



Bio 1.203	MMO	[RR-0743] Para 5.8.4. Please will the MMO spell out the significance of the point it is making at this paragraph. Is there an underestimate? To what extent? With what consequence? This issue could usefully be addressed in the SoCG. Please cross-refer to the consideration given in the SoCG.	The Applicant has clarified that in undertaking the fish entrapment estimates it has assumed that all four pumps are fully operational all the time. This is therefore a conservative estimate of impingement. The operating history for Sizewell B indicates that the annual average pump use is just over 3, rather than the 4 assumed in the modelling exercise. Based on this clarification the MMO is satisfied that the assessment is conservative.
Bio 1.204	MMO	[RR-0743] Para 5.13.1. Does the MMO consider that this information on commercial fishing vessels changes the conclusions of the either in this point or generally? Does it dispute those conclusions? If so how and with what result?	The MMO defer the answer to this question to a later deadline, to allow for further time to fully review and robustly advise.
Bio 1.207	The Applicant, EA, MMO	[APP-317] para 22.2.21. This references the WFD Compliance Assessment (Doc Ref 814). Please will the Environment Agency state whether it has any relevant concerns about water quality (not only under WFD) for plankton.	The MMO notes that this question is not directed to us and defers to the Environment Agency (EA).
Bio 1.208	The Applicant, EA, MMO	[APP-317] para 22.6.31 – “This chapter considers only the holoplankton component of the zooplankton community”. Please will the Applicant explain why it takes this approach and why it is valid and proper. Please will the EA and MMO state if they accept this approach and if they have any relevant concerns.	The MMO has received and reviewed the Applicant's response to this question and can confirm that we are satisfied with the approach taken by the Applicant.



Bio 1.209	The Applicant, EA, MMO	<p>[APP-317] paras 22.6.262 – 273, Table 22.32 and Plate 22.4 (Section D.d.f). The temperature plume.</p> <p>The ExA is asking this question not only for its relevance to plankton but also to the rest of this chapter of the ES.</p> <p>(i) It would be helpful if the Applicant could please list the other occasions in this chapter on which this data is used.</p> <p>(ii) the absolute water temperature exceeds 28°C over an area of 0.11 ha at the surface (98th percentile), with Sizewell B & C operating – Table 22.32. Please will the MMO and Environment Agency comment in the significance of this.</p> <p>(iii) Please will the MMO and Environment Agency also comment and explain the relevance of the 23°C-28°C range</p> <p>(iv) Plate 22.4. The title refers to plume temperature above 20°C and to Julian Days. Please will the Applicant say if the title should be to thermal uplift – derived presumably from Table 22.32. Please also say why Julian Days are used. Are not Julian days the continuous count of days since the beginning of the Julian Period? Please explain what is intended.</p>	<p>We note that (i) is directed to the Applicant.</p> <p>(ii) We note that this means that the cooling water discharge will increase the seawater temperature (98th% value) above 28°C over an area of 0.11 ha. This will be close to the outfall and is equivalent to the area of a circle with a diameter of around 40 m. Usually outfalls are expected to achieve acceptable dilution (i.e. reduction in temperature in this case) over a certain distance from the outfall, which is usually referred to as the mixing zone. Such zones are usually of the order of 100 m radius from the outfall. Therefore we note that this small area in the higher temperature category could be acceptable. However, we note that the Environment Agency would need to confirm whether this is acceptable for this site.</p> <p>(iii) We comment that the temperature bands quoted in the table provided within the applicant's response represents the limits for which the water body can be classed as having a different ecological status under the WFD with respect to the temperature preferences of fish in UK waters. The temperatures are the 98th percentile (i.e. higher temperatures occur no more than 2% of the time), and therefore represent near-maximal values. We note that the UKTAG document 'UK Environmental Standards and Conditions (Phase 2)' (2008) that specifies these standards, gives the following definition: "Temperature preferences were represented by the concept of a "niche" – fish spend two-thirds of their time within 2°C of a preferred temperature. The proposed boundary between high and good status for rivers is the upper limit of the niche in which most fish will spend two-thirds of their time ($\pm 2^\circ\text{C}$ of the preferred temperature). Similarly the boundary between good and moderate status is the upper limit of the niche in which most fish will spend all of their time ($\pm 5^\circ\text{C}$ of the preferred temperature)."</p>
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<p>Bio 1.210</p>	<p>The Applicant, EA, MMO</p>	<p>[APP-317] Table 22.32. Please will the Applicant explain what is meant by this table.</p> <p>All the figures are for the 98th percentile. A percentile is a score below which a given percentage of scores in its frequency distribution fall. What then is meant by a score which is below a range (such as between 23o and equal to or less than 28oC)? And what is meant by the areas in that context? What is meant by a percentile which is that 98% of the scores are below over 28oC?</p> <p>Is the table meant to show that for example 89.6 ha of the surface of the sea will be between 23o and 28o C when Sizewell B & C are both operating.</p> <p>In relation to thermal uplift, are there any uplifts in the Poor category (which is presumably exceeding 4o).</p> <p>There are other tables where this approach is used, for example Table 22.52 in section D.d.d – Operational; Temperature changes; cooling water discharges. Please will the Applicant cover them as well in its explanation. Please will the Environment Agency and MMO also comment and assist the ExA.</p>	<p>The MMO comments that the ecological status of a water body is assessed under the WFD under several classes ('Good ecological status' etc.). Fish have a preference for a certain temperature but can tolerate a range of temperatures. The ecological status classes are set according to the deviation of a near-maximum temperature from the preferred temperature. As stated in the Applicant's response "maximum (or 100th percentile) events, that occur for just 1 hour in the year-long simulation, are highly skewed by rare events or meteorological forcing in the model and have little ecological meaning hence the use of a 98th percentile." The 98th percentile value represents the temperature which is exceeded over a year for only 2% of the time. Each boundary between the various status class is defined by a 98th percentile temperature. The table therefore shows the area of the water surface where the predicted 98th percentile temperature exceeds the thresholds for each status level.</p>
<p>Bio 1.215</p>	<p>The Applicant, MMO</p>	<p>[APP-317] baseline, benthic invertebrate taxa, section B.a.a, para 2.7.16. This notes that the lagoon sand shrimp is protected under Sch 5 of the Wildlife and Countryside Act 1981. Is there any relevant defence to damaging or killing it?</p>	<p>The MMO advise the following: Lagoon sand worm (<i>Gammarus insensibilis</i>) is protected under Schedule 5 of the Wildlife and Countryside Act 1981. Under Section 9(4)(a) it is an offence to: (4) intentionally or recklessly—</p>



			<p>(a) Damage or destroy any structure or place which such animals use for shelter or protection; Relevant defences (outlined in Section 10) for which persons shall not being guilty of an offence include: -if the act was the incidental result of a lawful operation and could not reasonably have been avoided. It is ultimately the developer's responsibility to ensure that they are compliant with the relevant legislation. It should also be noted that under the Wildlife and Countryside Act 1981, the MMO is only able to issue wildlife licences for specific purposes, which does not include general development work. The MMO further note that Natural England should be consulted on all matters relating to Wildlife and Countryside Act and protected species.</p>
Bio 1.216	The Applicant, MMO	<p>[APP-317] baseline, benthic invertebrate taxa, section B.a.a, para 2.7.16. This notes that Sabellaria spinulosa is listed under s.41 NERC Act 2006. What steps is the SofS required to take in relation to it to fulfil the obligations in s.41?</p> <p>Please answer this question also in relation to benthic habitats Section B.a.b para 22.7.22, the construction of the cooling water intakes (section C.d) and Sabellaria spinulosa in general.</p>	<p>The MMO would like to clarify that it is for the competent authority on the decision (in this instance the ExA are recommending the decision to the SofS) to satisfy themselves of what their responsibilities are in relation to all sections of the NERC Act 2006. However, MMO would highlight that Natural England are an interested party, as specialist leads on this topic area.</p>
Bio 1.217	The Applicant, MMO	<p>[APP-317] baseline, offshore sabellaria spinosa reefs, section B.a.c, Table 22.37, radionuclides. The reader is referred to Chapter 25 of the ES. Please will the Applicant summarise the relevant parts and give the paragraph numbers for cross references?</p>	<p>The MMO notes that this question is for the Applicant.</p>



Bio 1.218	The Applicant, MMO	<p>[APP-317] Construction discharges of un-ionised ammonia, section C.c.f, para 22.7.151. Please will the Applicant explain why the magnitude of the impact is assessed as low “as discharges could occur throughout the construction phase”. That duration suggests the opposite. The ExA also notes the criteria in table 1.3 of appendix 6R [APP-170] where the Applicant says: “Medium - Medium-term temporary impacts, one to 12 years”. “Low - Short-term temporary, less than a year”.</p> <p>Please will MMO also comment.</p>	The MMO has received and reviewed the Applicant's response. We are satisfied with the applicant's response, the spatial extend of EQS exceedance is very small.
Bio 1.220	The Applicant, MMO	<p>[APP-317] section C.d, paras 22.7.204 and 22.7.211. At para 22.7.204 the ES states that less than 5% of the Coralline Crag would be impacted. At para 22.7.211 the figure of 6% “of the reef area” is given. Is this because the reef in para 22.7.211 is the Sabellaria spinulosa, which is only part of the Coralline Crag? If not, please explain further.</p>	The MMO notes that this question is for the Applicant.
Bio 1.223	MMO	<p>[APP-317], section C.d.b.b, para 22.7.214 reads “Monitoring of the <i>S. spinulosa</i> reef extent on the offshore Coralline Crag is recommended during both pre- and post-construction of cooling water infrastructure (22.12c).” This monitoring is again referenced at the consideration of inter-relationship effects, para 22.7.310 and in the operational phase (e.g. para 22.7.380).</p> <p>Please will the Applicant explain how this will be secured and what action will be taken, depending on the results of the monitoring.</p>	The MMO have received and reviewed the Applicant's response to this question and is satisfied that the monitoring of the <i>Sabellaria spinulosa</i> reef should remain a condition of the DML. The draft monitoring plan should be consulted on with both Natural England and the MMO detailing the pre- and post-constructing monitoring plans. The MMO continue to engage with the applicant and Natural England on this matter. We defer to Natural England for comments on the appropriate course of action to mitigate effects on <i>Sabellaria</i> .



		<p>What will be the thresholds and tests for action?</p> <p>Please will the MMO give its view on this proposal.</p>	
Bio 1.234	The Applicant, MMO	<p>[APP-317] Section C.b.f.e – Eggs and larvae sensitivity to underwater noise from navigational dredging, para 22.8.169. Please will the Applicant clarify whether this para is summarising Popper or is some other conclusion.</p> <p>Is the MMO satisfied with this approach?</p>	<p>The MMO has received and reviewed the Applicant's response and is satisfied with this approach. As the Applicant notes that there is limited evidence of the effects of underwater noise on fish eggs and larvae but has followed good practice in the approach it has taken.</p>
Bio 1.237	The Applicant, MMO	<p>[APP-317], Section C.b.g Underwater noise: impact piling, para 22.8.187. This states: "With the uncertainty and limited scientific evidence currently available, it is not considered appropriate to quantitatively assess the effects of vibration to fish receptors; therefore, the pressure has been scoped out." This is then compared with offshore wind farms which it is said have much larger scale hammer piling.</p> <p>Will the Applicant please say if this scoping out was agreed with the MMO. Please will the MMO say if it is content with this approach.</p>	<p>The MMO would like to clarify that it is not within our remit to determine what approaches are taken by the Applicant, we can however, advise both the applicant and the ExA of any comments/ issues we have identified. In this instance, within our relevant representation (para. 5.4.2.2 [RR-0744]) we commented that "the fish noise assessments is considered sufficiently comprehensive and satisfactory although it would have been helpful for the assessment to estimate the relative temporal exposure of fish within the various impact zones. This would have provided additional context for the worst-case scenario that has been assessed. However, it is noted that this would not have altered the conclusions of the assessment." The MMO is content with the response provided by the Applicant and with the additional assessment information provided by the Applicant in the ES Addendum.</p>

Bio 1.239	The Applicant, MMO	<p>[APP-317] Section C.e, Cooling water infrastructure, para 22.8.408 and following. Please will the Applicant explain why the effects of flushing during commissioning are not considered in this section.</p> <p>MMO may wish to comment.</p>	The MMO notes that this question is for the Applicant, we have received and reviewed this response and are content with the response provided by the Applicant.
Bio 1.242	The Applicant, MMO	<p>[APP-317] Section D.c.c.c Assessment of impingement losses, Table 22.111 – pre-mitigation table.</p> <p>(i) Please will the Applicant explain why eels are not in red, given that they are 1.89%SSB? Why is Twait shad 84.6% of landings shaded red when it is only 0.05% of SSB? Why are horse mackerel and mackerel in red. They are 0.00%.</p> <p>(ii) In relation to Twait shad, why is % of landings used when SSB is available?</p> <p>(iii) Why is the percentage of mean landings used for Allis shad when there is no figure for mean landings? In addition for this species, Allis Shad, the figure for %age of SSB is 0.018%.</p> <p>(iv) Please will the Applicant explain, and confirm the other figures in this table are correct, or amend if necessary. If amendments are made, please re-issue the table with changes clearly shown and consequential changes elsewhere in the ES set out.</p> <p>(v)Please will the MMO also comment on all of the above.</p>	The MMO has received and reviewed the Applicant's response to this question and is content with the response provided by the applicant. As the Applicant notes there were some shading errors in the original table, which have now been corrected. As noted by the Applicant, for some species, such as the <i>Allis shad</i> , it is more appropriate to reference impacts against population numbers rather than landings, as they are not commercially targeted species. The MMO have seen and commented on the updated assessments provided as part of the ES Addendum within our SOCG. The MMO are of the view that none of the updates change the conclusions of the assessment that effects are not significant regarding this matter.



Bio 1.243	The Applicant, MMO	<p>[APP-317] Section D.c.c.c Assessment of impingement losses, Table 22.112 – full mitigation table</p> <p>The ExA notes that this table does not include "Species where the impingement weight exceed 1% of the relevant stock comparator are shaded in red", as for Table 22.111.</p> <p>(i) Should that approach be adopted for Table 22.112. If so, please re-issue the table with changes clearly shown and consequential changes elsewhere in the ES set out. Please will the Applicant clarify.</p> <p>(ii) Why does this table show landings when SSB are available?</p> <p>(iii) Twaite shad – 32.4% of landings are impinged. That appears to be a very large percentage. Please will the applicant explain why it is so much higher than the other species. Also how is it calculated? Mean landings are 1 tonne. EAV weight of impinged fish is 0.43 tonnes. So should the figure be 43%? Either way, please will the Applicant comment on its significance. But is the relevant figure the percentage of SSB, namely 0.02%.</p> <p>(v) Please will the MMO also comment on all of the above.</p>	<p>The MMO has received and reviewed the Applicant's response to this question and is content with the response provided by the Applicant. The MMO have seen and commented on the updated assessments provided as part of the ES Addendum within our SOCG. The MMO are of the view that none of the updates change the conclusions of the assessment that effects are not significant regarding this matter.</p>
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<p>Bio 1.244</p>	<p>The Applicant, MMO</p>	<p>[APP-317] Section D.c.c.c Assessment of impingement losses, Table 22.113.</p> <p>Please will the Applicant explain why it has drawn seabass and thin-lipped grey mullet into this table. The figures for seabass seem simply to be 10% of those in Table 22.112. The figures for grey mullet are the same as in the table. The ExA notes the reference to Appendix 22I. Please will the Applicant summarise the point being made on this by that Appendix and give the paragraph and page numbers which are relevant.</p> <p>Please will the MMO also comment.</p>	<p>The MMO have received and reviewed the response by the Applicant and are content with the response provided by the Applicant and with the additional assessment information provided by the Applicant in the ES Addendum.</p>
<p>Bio 1.245</p>	<p>The Applicant, MMO</p>	<p>[APP-317] Section D.c.c.c Assessment of impingement losses, Table 22.114. Comparison of the effectiveness of different embedded mitigation measures. In the column LVSE mitigation, % effectiveness, the figure is always 61.7%. Why is this?</p>	<p>The MMO has received and reviewed the Applicant's response. We note that there are very significant challenges in understanding the effectiveness of the LVSE system in reducing fish impingement, in particular, because the modelling makes assumptions about fish behavioural responses to changes in flows which are difficult to validate. It is recognised that the LVSE design has been put forward by the Environment Agency as a mitigation measure for cooling water abstractions (in its good practice guidance), although this tends to be accompanied by Acoustic Fish Deterrent (AFD) systems (which are not currently proposed for SZC). While it is feasible that the LVSE design, on its own, will provide some benefit in terms of reductions in fish impingement, even if the benefit was zero, the MMO does not believe this would not materially change the conclusions of the overall fish entrapment assessment. On this basis the MMO do not consider that further discussions on the effectiveness of the LVSE design are required.</p>

Bio 1.247	The Applicant, MMO	<p>[APP-317] section D.c.i.a, Demersal fish and elasmobranch eggs /cases and larvae: sensitivity to bromoform chlorination by-product. Par 22.8.765 “This median lethal concentration is substantially (10,000-fold) greater than the target 5µg/l EQS for the Proposed development, which is exceeded over a very limited area (52ha at the surface and 0.67ha at the seabed).”</p> <p>Is the Applicant saying that the target EQS is too low? Is that a proper conclusion? By how much is the excess over the 52 ha area?</p>	The MMO have received and reviewed the response by the Applicant and are content with the response provided by the Applicant.
Bio 1.248	The Applicant, MMO	<p>[APP-317] Section D.e.a Commissioning discharges of hydrazine on fish discharged from the FRR, para 22.8.842.</p> <p>“The duration of the exceedance is short, with concentrations exceeding the acute PNEC for no longer than 3.25 hours at a time.”</p> <p>What is the time gap between such concentrations? What would be the minimum acceptable gap?</p>	The MMO have received and reviewed the response by the Applicant and are content with the response provided by the Applicant.
Bio 1.249	The Applicant, MMO	<p>[APP-317] Section D.e.b Interaction between thermal discharges and chlorine toxicity, para 22.8.845.</p> <p>This para closes with the following: “Therefore, no further consideration is made of the possible synergistic effects for seabed plumes”. Why is this? Please will the Applicant unpack this. 25.8 ha at the seabed will be >23oC (though below 28o) with both stations operating, which is said to be a “limited” area. With respect all areas are limited. And EQS for the TRO plume will be exceeded.</p>	The MMO have received and reviewed the response by the Applicant and are content with the response provided by the Applicant.



Bio 1.250	The Applicant, MMO	<p>[APP-317] Section D.e.c, Assessments of effects on fish receptors: thermal discharges and chlorine toxicity, para 22.8.849 concludes that “The inter-relationship of the TRO and thermal plumes is not predicted to increase the significance of effects concluded for the pressures alone”.</p> <p>How does the evidence point to this?</p>	<p>The MMO have received and reviewed the response by the Applicant and are content with the response provided by the Applicant.</p>
Bio 1.251	The Applicant, MMO	<p>[APP-317] Section D.e.f Assessments of effects at the sea-area or regional stock/population level: hydrazine and temperature changes, para 22.8.852. This states:</p> <p>“The inter-relationship of the hydrazine and thermal plumes is not predicted to increase the significance of effects concluded for the pressures alone. This conclusion applies to all fish receptors assessed”.</p> <p>Please will the Applicant explain how it reaches this conclusion. The ExA notes that in the previous paragraph it is recorded that "Considering the decay of hydrazine, increases in water temperature were found to enhance the toxicity of the compound for fish taxa”.</p> <p>Does the assessment of no significant effect in the last sentence of para 22.8.853 to change as a result and if not please explain why. Can the MMO throw any light on this?</p>	<p>The MMO have received and reviewed the response by the Applicant and are content with the applicant's response. The discharge of hydrazine will occur a maximum of once per day for a few hours. The modelling that has been undertaken is conservative and the Predicted No Effect Concentrations (PNEC) is also conservative. On this basis it is extremely unlikely that any significant effects will occur to fish that might be exposed to the intermittent plume. As the applicant notes, reported effects concentrations for fish are orders of magnitude greater than the PNEC. On this basis synergistic effects between hydrazine and the thermal plume are considered extremely unlikely.</p>
Bio 1.252	The Applicant, MMO	<p>[APP-317] Section D.e.g, Assessments of effects of localised displacement: hydrazine and temperature changes, para 22.8.853. This simply states that “It is unlikely that this inter-relationship would increase the significance of the effects of localised displacement”.</p>	<p>The MMO has received and reviewed the Applicant's response and are content with it. As the Applicant notes, reported effects concentrations for hydrazine for fish are orders of magnitude greater than the PNEC. On this basis synergistic effects between hydrazine and the thermal plume are considered extremely unlikely.</p>



		<p>Please will the Applicant explain why.</p> <p>Can the MMO throw any light on this?</p>	
Bio 1.253	The Applicant, MMO	<p>[APP-317] section D.e.k, Assessments of effects at the sea-area or regional stock/population level: primary and secondary entrainment. Para 22.8.860</p> <p>Please will the Applicant explain its conclusion that secondary entrainment does not increase significance “due to the fact that even if 100% mortality of entrained ichthyoplankton was assumed, the volume of cooling water is sufficiently low compared to tidal exchange to dampen any effects”.</p> <p>Can the MMO assist?</p>	<p>The MMO has received and reviewed the Applicant's response to this question and is content with it. The effects of entrainment of ichthyoplankton on Spawning Stock Biomass (SSB) are generally very small and much smaller than impingement impacts. It is generally assumed that there is 100% mortality of entrained ichthyoplankton. For both of these reasons, the MMO advise that the combined impact of entrainment of ichthyoplankton within the cooling water system and exposure to discharge plumes is not an issue of concern.</p>
Bio 1.254	The Applicant, MMO	<p>[APP-317] section C.f – UXO detonations, paras 22.9.197-22.9.202.</p> <p>(i) The MMO has expressed considerable concern about this aspect – see [RR-0743] paras 3.1.1 – 3.1.4. Please will the Applicant set out its response and will the MMO state their current understanding of the position. If this is already set out in their SoCG, and nothing has changed since then it will be adequate to state a short conclusion and to refer the ExA to the relevant paragraphs of the SoCG.</p> <p>(ii) How is the dedicated marine mammal mitigation protocol to be prepared in consultation with statutory stakeholders secured</p>	<p>(i) The MMO confirms that we were concerned that there was not sufficient information available within the application surrounding Unexploded Ordnance (UXO) clearance, and as such requested that they be removed from the Deemed Marine Licence. Should UXOs be identified, a separate Marine Licence Application will be made to the MMO. UXO's have now been removed from the DCO/DML.</p> <p>(ii) The Marine Mammal Mitigation Protocol (MMMP) secured by Condition 39 on the DML as part of the UXO licensed activity has been removed. The MMO advises that a MMMP should be secured within the DML due to impacts from piling within Southern North Sea SAC (see our SOCG).</p>



		<p>(para 22.9.201)?</p> <p>(iii) What are the mitigation measures for seals referred to at para 22.9.202 and how are they secured?</p>	<p>(iii) There are ongoing discussions between MMO, Natural England and the Applicant on mitigation proposed for seals. The MMO advises that Natural England be consulted on matters relating to marine mammals as specialists on this topic.</p>
Bio 1.256	The Applicant, MMO	<p>[APP-317] section D.b.b.a – Sensitivity to temperature changes, para 22.9.257.</p> <p>This comments on potential habitat loss in the Southern North Sea SAC. There are other instances e.g. relating to chlorinated discharges (section D.b.c.c, para 22.9.272)</p> <p>Please will the Applicant indicate where this is assessed in the shadow HRA and with what conclusion?</p> <p>Please cover all the instances of habitat loss for marine mammals, not just those mentioned specifically in this question.</p>	<p>The MMO notes that this question is for the Applicant. The MMO defers to Natural England for matters regarding the shadow HRA (see our comments within the SOCG).</p>
CG.1 Coastal Geomorphology			



CG 1.8	The Applicant, ESC, MMO	<p>Impacts on coastal processes</p> <p>The MMO [RR-0744] advises that monitoring options to address the uncertainties in the scale of predicted impact and hence the level of monitoring should be included in the MMP in particular for the monitoring of the BLF. It also advises that more detailed monitoring plans must be agreed for each project element and method. The MMO makes a number of other detailed criticisms of the MMP. Please comment on the criticisms made and provide an update as to the progress of agreeing the draft MMP.</p>	<p>The MMO notes the Applicant's response. It is agreed the detailed plans will need to be agreed once they are developed. In this sense the Coastal Processes Monitoring and Mitigation Plan (CPMMP) is more of a strategy outlining the methodologies under consideration and is part of the route to the development of the detailed monitoring plans. The process in developing these detailed plans should be described in the CPMMP.</p>
CG 1.9	ESC, MMO	<p>Impacts on coastal processes</p> <p>The draft Coastal Processes Monitoring and Mitigation Plan [AS-237] provides information on the mitigation proposed. Please indicate whether that mitigation is considered to be satisfactory and, if not, suggest any changes considered to be necessary.</p>	<p>The MMO notes that the only risk for impacts on coastal processes that requires mitigation in the view of the Applicant, is the supply of shingle beach material. This risk is mitigated by the proposed sacrificial soft coastal defence feature. Based on the studies provided this proposal is likely to achieve this aim. However, the MMO maintain the view that there remains a risk of effects around the interaction of the permanent BLF dredged area and the outer longshore bar which has not been considered because the applicant does not predict any significant effect from this. It is unclear what might be done to mitigate any unexpected effects there, we therefore recommend further surveys in the period following the completion of the dredged berth area for the permanent BLF.</p>



<p>CG 1.10</p>	<p>MMO</p>	<p>Impacts on coastal processes The ES Vol I, Appendix 6P, explains that the scope of the assessment has also been informed by ongoing consultation and engagement with statutory consultees throughout the design and assessment process. To facilitate engagement with statutory (and non-statutory) stakeholders on the marine assessments, the Sizewell Marine Technical Forum has been established. The Marine Technical Forum has an independent chair, supported by a technical secretariat supplied by SZC Co. together with nominated technical representatives from Natural England, the EA, the MMO and the East Suffolk Council, and any consultants working on their behalf. The Zone of Influence (Zol) for the coastal geomorphology assessment has been defined in agreement with the Marine Technical Forum as the Greater Sizewell Bay. Please explain further the role of the MMO as a nominated technical representative of the Marine Technical Forum and indicate whether the Zol was agreed by the MMO at that stage?</p>	<p>The role of the Marine Technical Forum (MTF) further oversees the Monitoring and Mitigation Plan through the construction and operation phases, the approval of this plan is contained within the DML, and as such, is to be enforced by the MMO. Our attendance at these forums allows us to receive the most up to date information from the Applicant, and further hear comments from the other interested parties, whom we would be consulting on the sign off of plans contained within the DML.</p>
<p>CG 1.11</p>	<p>MMO</p>	<p>Impacts on coastal processes The ES Vol I, Appendix 6P [APP-171], Hard coastal defence feature 1.3.45 indicates that the final design and detailed construction plans for the HCDF were not known at the time of assessment. Though considered unlikely, it has been assumed as a worst case that heavy plant will be required to operate on the upper beach as part of the construction works. Please indicate whether it is agreed that the assumption of use of heavy plant in the</p>	<p>The MMO defer to the Applicant as to whether this is the worst-case scenario (WCS) based on the options they have assessed. If this is indeed the case the MMO would expect to see an assessment of the expected impacts on the WCS presented for comment within the examination. The MMO would like to also clarify that the HCDF has now been clarified as above Mean High Water Springs (MHWS) and as such, is now outside of our remit.</p>



		assessment reasonably represents the worst case. In the absence of detailed design and detailed construction plans explain how the worst case scenario for the HCDF be fairly assessed?	
CG 1.12	MMO	<p>Impacts on coastal processes The ES Vol I, Appendix 6P [APP-171], Beach landing facility, paragraph 1.3.46, explains that use of a jack-up barge is considered the worst case for construction of the BLF as the cantilever method (installation from each previously assembled deck section) would have no separate impact apart from the piles themselves.</p> <p>(i) Please indicate whether it is agreed that the assumptions made in the assessment reasonably represent the worst case scenario for the construction of the BLF? (ii) Are there any other factors which should have been taken into account? (iii) Please provide an update in the light of Change 2 to the original application.</p>	<p>The MMO defer to the Applicant as to whether this is the worst case scenario (WCS) based on the options they have assessed. If this is indeed the case the MMO would expect to see an assessment of the expected impacts on the WCS presented for comment within the examination. The MMO would expect to see justification as to why there are no additional impacts using the jack up barge as opposed to the cantilevered method. Regardless, the MMO expect to see a consideration of the impacts of piling.</p>
CG 1.13	The Applicant, MMO	<p>Impacts on coastal processes The ES Vol I, Appendix 6P [APP-171], paragraph 1.3.49, indicates that dredging would only be needed when the BLF approach is too shallow or the requirements for the barge grounding pocket are not met and when the BLF is in use. The dredging requirement (clearance) for vessel (barge and tugboats) access to the BLF is not currently known but is considered to be small (substantially less than 1m). The</p>	<p>We consider there remains uncertainty in the maintenance dredging requirement for the permanent BLF associated with the response of the outer longshore bar where the dredged berth area impinges on the bar at a depth of more than 1m. It is recommended that additional multi beam surveying is undertaken in the 6 month period following the first establishment of the BLF dredged area to a) confirm the low sedimentation rate in the dredged area and b) confirm the early response of the outer longshore bar to the dredged area. The findings</p>



		<p>dredging requirement for the docked (grounded) barge has also not been finalised. Please confirm that:</p> <ul style="list-style-type: none"> (i) the assumptions set out in Appendix 20A of Volume 2 of the ES [APP-312] made in relation to dredging are agreed; (ii) that these assumptions would over-represent the required barge traffic over the construction period; and (iii) the assessments conservatively assume maintenance of the approach channel and grounding pocket throughout the construction period of the proposed development. (iv) Please provide an update in the light of Change 2 to the original application. 	<p>of these surveys will address the uncertainties and allow a better definition of future maintenance dredging requirement. These comments remain for the Permanent BLF under Change 2; the new temporary BLF being beyond the longshore bar system and not including any dredging does not have the same issues.</p>
<p>CG 1.25</p>	<p>The Applicant, MMO</p>	<p>Impacts on coastal processes The draft Coastal Processes Monitoring and Mitigation Plan [AS-237] Table 1, summarises the SZC components that are considered to require coastal geomorphology monitoring, along with the proposed method and rationale.</p> <ul style="list-style-type: none"> (i) Please indicate whether any other components should be monitored? (ii) Please provide further justification for an explanation of the frequency and spatial extent of the monitoring proposed in this table for the relevant components. 	<p>The MMO notes that this question is for the Applicant. However, the MMO provides the following comments:</p> <ul style="list-style-type: none"> (i) it has been agreed that bed sediment size monitoring is not needed in relation to coastal processes. The question related to the risk of change to bed substrate type for ecological receptors which should be considered elsewhere. (ii) The proposed monitoring strategy is, in general, appropriate as a basis for developing detailed plans in due course. We do however recommend additional Multibeam echosounder (MBES) surveys in the area around the permanent BLF dredged area following the completion of the dredge (It is recommended that additional multi beam surveying is undertaken in the 6 month period following the first establishment of the BLF dredged area to a) confirm the low sedimentation rate in the dredged area and b) confirm the early response of the outer longshore bar to the dredged area. The findings of these surveys will address the uncertainties and allow a better definition of future maintenance dredging

			<p>requirement). This is recommended to cover the risk of underprediction of infill rates in the dredged area and the potential for effect on the outer longshore bar. Please see the SOCG for our updated comments on the Coastal Processes Monitoring and Mitigation Plan. We would like to further highlight the Environment Agency, Natural England and East Suffolk Council as interested parties on the Coastal Processes Monitoring and Mitigation Plan.</p>
<p>CG 1.26</p>	<p>The Applicant, MMO</p>	<p>Impacts on coastal processes The draft Coastal Processes Monitoring and Mitigation Plan [AS-237], Section 2, provides the suite of monitoring methods which would be used to track changes in coastal geomorphic receptors and annual vegetation, including impacts arising from SZC pressures and activities. The methods combine the use of continuous remote sensing techniques for early warning of any impacts with targeted, high-accuracy, field surveys. (i) Please indicate whether any other methods should be utilised? (ii) Please confirm that the suite of methods proposed represents an appropriate balance between remote and on-site techniques.</p>	<p>The MMO has the following comments to make based on the Applicant's response:</p> <p>(i) a reasonable range of methods are proposed from which a detailed monitoring plan can be developed. It is agreed that aircraft-based LiDAR is less useful however, consideration of drone-based LiDAR would be beneficial as an option. A view on target accuracies for the various methods will be needed within the detailed monitoring plans.</p> <p>(ii) In general, a reasonable balance of remote and onsite techniques is given with the only area for further on-site measurements being our recommendation for further MBES around the permanent BLF dredged area in the period following its dredge. The anticipated detailed plans should also show the process by which the remote methods trigger further on-site measurements to investigate unexpected changes.</p> <p>Please see the SOCG for our updated comments on the Coastal Processes Monitoring and Mitigation Plan. We would like to further highlight the Environment Agency, Natural England and East Suffolk Council as interested parties on the Coastal Processes Monitoring and Mitigation Plan.</p>



CG 1.27	The Applicant, MMO	<p>Impacts on coastal processes</p> <p>The draft Coastal Processes Monitoring and Mitigation Plan [AS-237], Section 5.2, indicates that all Beach Landing Facilities (BLF) effects have been classified as not significant, although some were minor and some negligible. Minor effects were predicted to arise from the reprofiled navigation channel leading to the permanent BLF jetty and propeller wash from tugboats on the longshore bars. It confirms that seabed reprofiling (dredging) would be required in order to gain safe navigational access to the enhanced permanent BLF jetty. Please explain in further detail:</p> <p>(i) why the altered bed shear stress over this area would have low impact duration and probability;</p> <p>(ii) why the occurrence of a storm could be relied upon to result in rapid shrinkage of the effect;</p> <p>(iii) the reliability of the conclusion reached that higher than natural quiescent levels of suspended sediment concentration arising from propeller wash from tugboats would be directed to the south.</p>	The MMO has no comments to make at present on the Applicant's response to this question.
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CG 1.28	The Applicant, MMO	<p>Impacts on coastal processes</p> <p>The draft Coastal Processes Monitoring and Mitigation Plan [AS-237], Section 5.2, indicates that as the BLF is close to the Minsmere-Walberswick SPA and Minsmere to Walberswick Heaths and Marshes SAC, precautionary monitoring associated with BLF-use is proposed in order to confirm the predicted no significant effect of bed reprofiling and tugboat propeller wash. However, it is</p> <p>proposed that this aspect of the beach and longshore bar monitoring would be cease once shown that these activities have no significant effect on the designated sites. Given the designation of these particular sites, does the proposed continuation of background monitoring provide sufficient safeguards for the longer term?</p>	<p>The MMO comments as follows in light of the Applicant's response. We note that the approach of more intensive monitoring at the outset of the construction phase of the development which is then reviewed and amended as the scale of changes is confirmed is a reasonable approach. There may be a case for preparing for additional surveys following the first 1 or 2 storm periods following the commencement of construction activities to provide further confidence in the background remote methods capturing any deleterious changes.</p> <p>The MMO identifies Natural England as an appropriate body for comments on protected SPA and SAC sites, as the Statutory Natural Conservation Body, and specialists on this topic area.</p>
CG 1.31	The Applicant, MMO	<p>Impacts on coastal processes</p> <p>The draft Coastal Processes Monitoring and Mitigation Plan [AS-237], Section 6.2 and 6.3, set out the proposed beach management framework and the mitigation trigger (beach volume). Please confirm that these sections of the draft plan have been agreed and, if not, why not and highlight any changes sought.</p>	<p>Following our review of the Applicant's response, our only comment at present is to request a view of what the baseline will be- i.e. over which period will it be calculated; the whole 30-year data period or representing more recent variability in beach volumes?</p> <p>Please see the SOCG for our updated comments on the Coastal Processes Monitoring and Mitigation Plan. We would like to further highlight the Environment Agency, Natural England and East Suffolk Council as interested parties on the Coastal Processes Monitoring and Mitigation Plan.</p>



CG 1.32	The Applicant, MMO	<p>Impacts on coastal processes</p> <p>The draft Coastal Processes Monitoring and Mitigation Plan [AS-237], Section 6.5.4, states that the proposed beach maintenance/sediment management approaches would not have an adverse effect on designated supra-tidal shingle habitats.</p> <p>(i) Please confirm that this section of the draft plan has been agreed. If not, please explain why that is the case and highlight any changes sought.</p> <p>(ii) Is it agreed that the Leiston - Aldeburgh</p> <p>SSSI is too distant to be affected by beach management activity at SZC?</p>	<p>The MMO are content with the answers from the Applicant for this question. However, ultimately, the MMO defers to Natural England on comments regarding the SSSI. Please see the SOCG for our updated comments on the Coastal Processes Monitoring and Mitigation Plan.</p>
DCO.1 Draft Development Consent Order (DCO)			
DCO 1.9	The Applicant, The Host Authorities, MMO	<p>Art 2, definition of "mean high water springs". Does the time period need to be specified?</p>	<p>The MMO notes that the definition of "mean high water springs" does not need to have a specified period of time. This wording is found in other DCOs, for instance Hornsea 3- "mean high water springs" or "MHWS" means the highest-level which spring tides reach on average over a period of time". The MMO notes that we have not yet received a copy of the Applicant's responses to any of the questions on the DCO and so cannot comment on their answers at this stage (this applies the entire "DCO" comments section).</p>



DCO 1.42	The Applicant, MMO	<p>Art 46(1).</p> <p>(i) This incorporates s.63 of the Harbours Docks and Piers Clauses Act 1847 which prohibits vessels from lying near the entrance of harbour or dock without permission “as soon as the harbour or dock shall be so far completed as to admit vessels to enter therein”. How is it envisaged that this operates for a harbour without walls, the entire boundary of which is its entrance, and what is its purpose? Is it practical from either the point of view of the undertaker or from the masters of vessels? Also from what point in time is the harbour “so far completed as to admit vessels to enter therein” in this case?</p> <p>(ii) It also incorporates s.74 of the same Act which makes vessel owners responsible for damage done to the harbour etc and works connected with it by any “vessel or float of timber”. Is this justifiable and practical for a harbour which is not itself protected by walls or any other barrier? It would appear that the owner of drifting timber or a drifting vessel from absolutely anywhere would be liable, notwithstanding that damage to this harbour would not have been foreseeable from the place where the timber or vessel broke free or was cast adrift.</p> <p>(iii) It also incorporates s.84 of the same Act. Should the incorporation expressly limit the offence to summary jurisdiction in order to meet s.120 and Sch 5 para 32B of the PA2008?</p>	<p>The MMO notes that this question is for the Applicant. The MMO would like to further clarify that we have no control over the drafting of any part of the DCO. Please see the SOCG for the MMO's comments and advice on Part 6- the Harbour Powers.</p>
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DCO 1.45	The Applicant, MMO	<p>Art 62.</p> <p>(i) This begins with an A which appears to be a typographical error.</p> <p>(ii) Why is Art 62(1) needed? What mischief is it designed to overcome? Or is it simply setting out the circumstances in which the rest of Art 62 takes effect? Please will the Applicant clarify the drafting.</p> <p>(iii) Is the reference to “grant” intended to include the grant of a freehold?</p> <p>(iv) Is the grant of a lease or freehold under Art 62(1) which includes provisions referred to in Art 62(2) intended to or capable of relieve the undertaker of the duties and functions delegated and the duties, responsibilities and consequences of their exercise? If so, how is that justified?</p> <p>(v) Is the intent to put the lessee / grantee in the same position as the undertaker in the exercise of those functions, both positive and negative, both criminal and civil obligations and consequences?</p>	<p>The MMO notes that this question is for the Applicant. The MMO would like to further clarify that we have no control over the drafting of any part of the DCO. Please see the SOCG for the MMO's comments and advice on Part 6- the Harbour Powers.</p>
DCO 1.46	The Applicant, MMO	<p>Art 64(9).</p> <p>This provides for byelaws to be available at the harbour master's office. Should they not also be available online?</p>	<p>The MMO notes that this question is for the Applicant. The MMO would like to further clarify that we have no control over the drafting of any part of the DCO. Please see the SOCG for the MMO's comments and advice on Part 6- the Harbour Powers. The MMO would like to further note that we have not yet been provided a copy of the applicant response to this question. Our current advice to the applicant identifies that the confirmation of byelaws is a process carried out by the Secretary of State – this is a Department for Transport (DfT) function and the procedures set out in this provision should be checked with the DfT policy team. We also recommended having these available online (with a</p>



			weblink in a footnote). We would advise that this request is appropriate, that the MMO have requested similar within our Harbour Order applications allowing for better public accessibility of certain aspects.
DCO 1.47	MMO	The ExA notes the MMO's concerns expressed in its RR, particularly at para 1.1.4, and its offer of further advice. Will the MMO please give its fullest advice in its written representation and follow through any responses, comments and so on to these ExQs on the Harbour Powers.	The MMO have worked to compile their fullest advice for the applicant and the ExA on Part 6 of the DCO, we provide this within our SOCG.
DCO 1.48	The Applicant, MMO	Part 6 (other than Art 75). Please will the Applicant and the MMO include in their Statement of Common Ground the provisions in Part 6 setting out clearly the areas of agreement and of disagreement	The MMO have worked to compile their fullest advice for the applicant and the ExA on Part 6 of the DCO, we provide this within our SOCG.



DCO 1.61	The Applicant, ESC, MMO, Natural England	<p>Sch 1 Part 1. Work No 2.</p> <p>The routes of the tunnels are not shown. Please will the Applicant explain why. Please also confirm that whether shown or not, they will not extend outside the Order Limits or the limits to the Works comprised in Work No. 2 shown on the Works Plans.</p> <p>Work numbers 2B and 2D shown on the works plans indicate the separation between the cooling water intakes for units 1 and 2.</p> <p>Can the applicant explain the separation distances between them, which presumably accounts for tunnelling for unit 1 (work no. 2A) being 200m shorter than the corresponding water intake for unit 2 (work no. 2C)?</p> <p>Whilst the intake locations are set out on the works plans, the limits of deviation for the bored tunnels themselves are unlimited within the harbour area as shown on the works plans. This also applies to work no. 2E, 2G, 2I and 2K, which extend between work no 1A and terminate at work 2F, 2H, 2J and 2L respectively Can the applicant confirm what assumptions have been made regarding their alignment within the ES and HRA, and why more defined limits of deviation cannot be set out on the works plans.</p> <p>ESC, MMO and Natural England may also wish to comment on this.</p>	<p>The MMO notes that this question is for the Applicant. The MMO would like to further note that we have not yet been provided with the applicant's response to this, and as such will defer to a later deadline should we wish to comment on their response.</p>
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DCO 1.62	The Applicant, MMO, Environment Agency	Sch 1 Part 1, Work No. 2B. This includes the phrase “capital dredging”. The ExA’s understanding of this is that it means “dredging to a depth not previously dredged, or to a depth not dredged within the last 10 years” (https://www.gov.uk/guidance/dredging). Is that the meaning which the Applicant intends and is it an accepted definition? Would it be helpful to include this in the definitions? If not, why not? And what alternative wording does the Applicant propose?	The MMO agrees that if the definition of capital dredging is added to the DCO, this wording is the appropriate definition. We further note that the definition for “capital dredging activity” is currently drafted into Schedule 20 (DML) Paragraph 1 as: <i>"means an activity which comprises the excavation of the seabed, in an area or down to a level (relative to Ordnance Datum) not previously dredged during the preceding 10 years"</i> .
DCO 1.101	The Applicant, MMO	Sch 20 – deemed Marine Licence (“DML”) – definition of “authorised development”. Why is this needed? There is a definition already in Art 2. What is to be the position if there is a conflict between the two definitions? Surely the convention that by including the matter the draftsman will have intended there to be meaning (and therefore a difference) will come into play. The DML uses other terms from the remainder of the DCO without redefining them, such as Work No. 1A(m). And it includes other terms, such as “commence” giving them a different meaning. Also, the definition of “environmental information” in the DCO and the DML is different and it is not clear if this is for good reason.	The MMO notes that this question is directed to the applicant and would like to further clarify that we have no control over the drafting of any part of the DML. Please see the SOCG for the MMO's fullest, and most up to date comments and advice on the DML. We do however note the need to have certain elements replicated and contained within the DML so that it functions as a consent on its own should the DCO be made. The MMO advise the applicant use consistency when drafting and will continue to comment on drafting matters at following deadlines.



DCO 1.102	The Applicant, MMO	<p>Sch 20 Para 1. Definition of “maintain”. This originally required maintenance activities to have been subject to the assessment in the environmental information and in Revision 3 [AS-143] has the proviso that the work do not give rise to unassessed effects.</p> <p>(i) Should it be made clear that the mitigation required by the ES and that applied elsewhere in this DCO must be complied with? (ii) Is it right to apply this to the whole of the “authorised development” as defined in the DCO given that this is in a deemed marine licence? (iii) The same question the ExA raises on Art 2 of the dDCO in relation to “maintain” also applies here.</p>	<p>The MMO comment as follows:</p> <p>(i) Yes this should be made clear, and any mitigation required for works within the UK Marine Area should be secured within the DML. (ii) Only matters within the MMO's jurisdiction should be conditioned and secured within the DML allowing the MMO to function as the marine regulator if the Order is made. (iii) We note that usually maintenance activity is signed off in a maintenance plan which contains the mitigation in it, so this could be dealt with post consent.</p>
DCO 1.103	The Applicant, MMO	<p>Sch 20 Para 1, definition of “undertaker”. The name given here for the company is different from the name in the definitions of the DCO. Please align the two.</p>	<p>The MMO notes that this question is directed to the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the applicant and ExA on it.</p>
DCO 1.104	The Applicant, MMO	<p>Sch 20 Para 1, definitions of Work No. 1A(m) and other works. Is there not an element of circularity or repetition here? Para 1 tells us that Work No. 1A(m) means the Beach Landing Facility. The ExA has searched for this phrase elsewhere in the DCO. It appears only in Sch 1, Part 1, the list of works where we are told that Work No 1A(m) is “Beach landing facility, including associated structures and plant;”. Beach Landing Facility is a more helpful and practical phrase than Work No.1(M), but (i) the phrase is only used in paragraph headings to the deemed marine licence and (ii) should not the definition be the</p>	<p>The MMO notes that this question is directed to the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the applicant and ExA on it.</p>



		other way around: “Beach Landing Facility” means Work No 1A(m)”? This may be a small drafting point. If there is more to it than that, please will the Applicant and MMO explain.	
DCO 1.105	The Applicant, MMO	Sch 20, Para 2 – change of the MMO address and email address can be notified in writing. How does this operate for members of the public who may wish to raise issues or alert the MMO to a state of affairs?	The MMO raises that this relates more to the Applicant submitting "returns" under the conditions of the DML to the MMO. The MMO's details are readily available to the public on the government website.
DCO 1.106	The Applicant, MMO	Sch 20 Para 3 – transfers of the DML. This appears to allow transfers which do not fall within Art 9 of the DCO to take place, in other words for the DML to be separated from the DCO. Is it not the intention to ensure that only the transfer of both together should be possible?	The MMO defer the answer to this question to a later deadline, to allow for further time to fully review and robustly advise.
DCO 1.107	The Applicant, MMO	Sch 20 Para 4. This is the heart of the licence and para 4(1) licences any licensable marine activities under s.66(1) of the MCA Act 2009 which form part of the authorised development which are not already exempt under a s.74 provision. The attention of the Applicant and MMO is drawn at this point to the definition of “authorised development” in Art 2 of the DCO and to the definition on para 1 of Sch 20 which is apparently to the same effect. What is the purpose of Para 4(2)? It is not stated whether it expands or limits the authorisation given by	The MMO defer the answer to this question to a later deadline, to allow for further time to fully review and robustly advise.



		para 4(1). Please will the Applicant and MMO consider, explain and amend the drafting as necessary.	
DCO 1.108	The Applicant, MMO	Sch 20 Para 5(e). This allows replacement of structures. Should it be limited to like for like or otherwise limited? If not, how will environmental assessment aspects be met?	The MMO advises that this should be like for like unless otherwise agreed by the MMO. The Applicant would have to submit documents to the MMO outlining the proposal and the impacts of it prior to the MMO's determination of the approval.
DCO 1.109	The Applicant, MMO	Sch 20 Para 6. This refers to "sub-paragraphs (4)(a) to (4)(m)". Of which para please?	The MMO notes that this question is directed to the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it.
DCO 1.110	MMO, ONR	Sch 20 Para 8. This states that certain failures by the licence holder "may render this licence invalid". This would appear to be a draconian penalty or remedy where essential elements of a nuclear power station are concerned, a remedy which cannot in reality be used when it is borne in mind that the licensed activities include maintenance and replacement of for example the cooling water intakes, outfalls and tunnels. It is obviously important that the DML is observed and that effective sanctions exist. Is invalidity a legal consequence which follows from certain failures by the licence holder? Please will the MMO explain what other remedies are available to it short of revocation whether it considers them to be adequate on the assumption that the licence could not in reality be revoked. Should	The MMO defer the answer to this question to a later deadline, to allow for further time to fully review and robustly advise.



		there be some consultation or liaison between the MMO and ONR if invalidity or revocation were to be contemplated? These questions are addressed primarily to the MMO, and also to the ONR, but the Applicant should feel free to contribute.	
DCO 1.111	MMO, ONR, The Applicant	Sch 20 Para 11. This requires prior approvals from the MMO for each licensed activity and prohibits commencement until that approval has been issued. There are similar and allied provisions in paras 12, 13, 14, 15, 16, 17, 18, 19 and 20. This may be appropriate during the construction phase. How is it intended to work during operation (again, the repair and maintenance of the structures are licensed activities) and should there not be exceptions for urgent or emergency works? Is the defence in s.86 of the MCAAct 2009 adequate?	The Applicant must satisfy themselves that they meet the criteria within s.86 of the MACAA 2009 for emergency works, to carry out with this would be an offence.
DCO 1.112	The Applicant, MMO	Sch 20 Part 3 – para 29 – “rock material from a recognised source”. What is meant by “recognised source”? As drafted this lacks clarity and precision.	The MMO notes that this question is directed to the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it.
DCO 1.113	MMO, The Applicant	Sch 20 Para 41. This regulates commencement of work on the Soft Coastal Defence Feature. Is that not above MHSW and thus outside the jurisdiction of the MMO? The ExA raises the same question in relation to the Hard Coastal Defence Feature.	The MMO confirm that we are currently still liaising with East Suffolk Council and will aim to provide a response at future deadlines regarding this point.
DCO 1.114	MMO, The Applicant	Sch 20 Para 43 prohibits the delivery of rock armour “until the relevant details have been submitted to and approved by the MMO”. What	The MMO confirm that we are currently still liaising with East Suffolk Council and will aim to provide a response at future deadlines regarding this point.



		mischief is this designed to prevent and what are “relevant details”? (a) – (f) presumably give some indication but the list is inclusive not exclusive. Is the issue quality and chemistry of the rock armour, or the delivery details or some other concern?	
DCO 1.116	MMO, The Applicant, EA	Sch 20 Para 50. Does this not overlap and duplicate the Environment Agency’s controls, and if not, should it not rather be a requirement	The Applicant has drafted this inclusion. The MMO defer to the Environment Agency for comments as to whether there is duplication on this point.
DCO 1.117	The Applicant, MMO	Sch 20, Part 4. Please will the Applicant supply plans showing these Works areas? Is there not a case, in the interests of practicality of use, for referring to deposited plans (which would in case of conflict be subordinate to the co-ordinates in Part 4) which can then be also be placed on the MMO website?	The MMO notes that this question is directed to the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it. The MMO would also advise that the plans showing the works areas for the authorised project be under the DCO. The MMO clarifies that anything submitted to the MMO via "returns" for DML conditions, will be made publicly available through our public register.
DCO 1.119	The Applicant, MMO	Sch 20. Please will the Applicant and the MMO provide a Statement of Common Ground on the provisions in Sch 20 and Art 75 setting out clearly the areas of agreement and of disagreement, and explaining the reasoning for their positions.	Please see the SOCG.
DCO 1.121	MMO	The MMO’s relevant representation does not use the examination library references. Please will the MMO submit a revised RR-0744 with the references alone added and ensure their use in future submissions to the examination.	The MMO have provided an updated copy of the RR with examination references.



DCO 1.124	MMO	<p>Sch 23.</p> <p>The ExA notes that the MMO in its RR-0744 has concerns about Sch 23 and seeks instead that disputes over approvals pursuant to the DML should be dealt with by way of judicial review (para 2.1.12 and following). The norm in the case of regulatory approvals is for there to be an appeal process on the merits before a right to review on the law is available. Whilst the PA2008 does not contain such a process for approvals pursuant to requirements it is now common for a process along the lines of Sch 23 to be included in DCOs. Should not the comparison be with the appeal system under s.73 of the MMCAAct 2009 suitably adapted for approvals pursuant to conditions of a DML, rather than judicial review? Will the MMO please outline the process which applies to disputes over submissions for approvals under a DML?</p>	<p>The MMO defer the answer to this question to a later deadline, to allow for further time to fully review and robustly advise.</p>
DCO 1.147	The Applicant, MMO	<p>Art 64(4).</p> <p>What is the justification for choosing 28 days rather than the original one month for notice of application for confirmation of byelaws.</p>	<p>The MMO advises the use of "28 days" as not each month within the year is the same length. This provides a firmer control over the four week period intended when using the term "month".</p>
DCO 1.148	The Applicant, MMO	<p>Art 73 – use of BLFs.</p> <p>As the temporary BLF is not intended to be used after construction, its use for maintenance and decommissioning is surely unwarranted. If so, please will the Applicant propose amendment to this article.</p>	<p>The MMO notes that this question is for the applicant.</p>
DCO 1.149	The Applicant, MMO	<p>Art 75A – appeals in relation to deemed marine licence.</p> <p>There needs to be explanation of this addition in the Explanatory Memorandum. It would be helpful if that explanation could also be set out</p>	<p>The MMO notes that the action in this question is for the Applicant. Please see our written representation and the SOCG supplied at Deadline 2 for the MMO's advice on this Article.</p>



		in the response to this question. Please will the MMO set out its view on this Article and Sch 20A	
DCO 1.150	The Applicant, MMO	Art 82(6) no arbitration of consents or approvals by the MMO. Please will the MMO say if it approves this wording.	The MMO are content with the drafted wording "(6) Any matter for which the consent or approval of the Marine Management Organisation is required under any provision of this Order shall not be subject to arbitration.".
DCO 1.151	The Applicant, MMO	Art 86 – marine enforcement authority. Please will the Applicant explain and give the statutory references for the mischief this Article and the amendment since the first draft DCO is addressing. Please will the MMO also comment and say if it approves the wording in the third draft..	The MMO notes that this section now states: "Marine enforcement authority 86. For the purposes of section 173 of the 2008 Act, the Marine Management Organisation will be the relevant local planning authority in respect of land seaward of the mean low high water springs and the area within the limits of deviation for Work No. 1A(m) (PBLF), Work No. 1A(bb) (tBLF) and Work No. 1A(n) (SCDF)." We confirm that there are ongoing discussions between the applicant, ESC and MMO. The MMO also requests that the Applicant adds clarity on the limits of deviation.
DCO 1.160	The Applicant, MMO	Sch 20 and Sch 20A – the deemed marine licence and the appeals procedure. Please will the MMO provide its comments on the changes to Sch 20 since the original submission and on new Sch 20A. Please will the Applicant provide a note on the reasons for the changes, or point the ExA to where the reasons may be found in the Applicant's submissions thus far.	The MMO provides its updated comments on Schedule 20 and 20A within our written representation and the SOCG supplied at Deadline 2.
DCO 1.161	The Applicant, MMO	Sch 20, Pt 1, para 2(3). Should there not be an "(2) Unless otherwise advised in writing by the MMO ... " introduction to this sub-para? Otherwise, a change to the web address or new system would appear to require a variation of the DCO.	The MMO notes that this question is for the Applicant, as we do not have control over the drafting. The MMO would advise that we have no issues with the proposed amendment in this question.



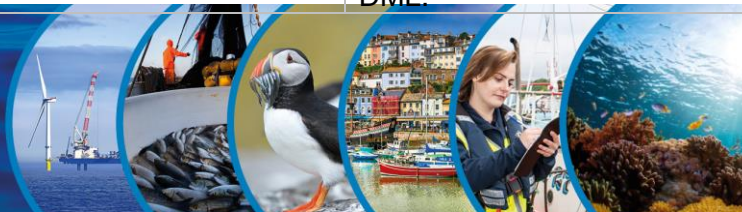
		This question applies to other instances of addresses and telephone numbers in the deemed licence, e.g. Sch 20, Pt 3 para 9	
DCO 1.162	The Applicant, MMO	Sch 20, Pt 2 para 4(2)(c)(ii). Does this make sense? What is "by pass (movement alongshore)"?	The MMO notes that this question is for the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it. As stated within our SOCG, the MMO highlight that it would be clearer to state "replacement or by-pass (movement alongshore) of sacrificial sediments...".
DCO 1.163	The Applicant, MMO	Sch 20, Pt 2, para 7A. This contemplates transfer of the deemed marine licence to an entity which is not the Undertaker. Would it not be preferable for and Art 8 (or should the reference be to Art 9?) transfer to transfer also the deemed marine licence?	The MMO notes that this question is for the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it.
DCO 1.164	The Applicant, MMO	Sch 20, Pt 2, para 7A. Are the remedies in s.72 of the Marine and Coastal Access Act 2009 likely to be used in practice? Are modifications, strengthenings or other sanctions and remedies necessary in the case of a nuclear power station?	The MMO notes that this question is for the Applicant, however, the MMO would comment that if what is meant by "modifications" under S.72 is referring to variations, we advise that many DML's are varied.
DCO 1.165	The Applicant, MMO	Sch 20, Pt 2, para 7B. Should the amendments to plans etc in this Art be subject to the usual EIA limitation?	The MMO notes that this question is for the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it.
DCO 1.166	The Applicant, MMO	Sch 20, Pt 3, para 10. What is meant by "(a) a planned timetable for each activity as outlined in Part 2". The reference to Part 2 appears to be Part 2 of a	The MMO notes that this question is for the Applicant and would like to further clarify that we have no control over the drafting of any part of the DML, we can only advise both the Applicant and ExA on it.



		different document.	
DCO 1.167	The Applicant, MMO	Sch 20, Pt 3 para 17. Application for approval of a Coastal Processes Monitoring and Mitigation Plan. By sub-para (f) this application “must include (f) confidence that the proposed mitigation will be effective”. (i) Should it not rather be demonstrating confidence? In addition, what level of confidence, how is misplaced confidence avoided? (ii) Should there be a statement of the purpose for which the mitigation is to be “effective”? (iii) Whatever the answer to (ii), please explain what is the purpose of this mitigation.	The MMO advises that this wording was drafted by the Applicant and the MMO take on board the ExA's concerns. The MMO advise that the Applicant review the drafting of this working line with the Five Tests the MMO applies to conditions: 1. The condition must be necessary; 2. The condition must relate to the activity or development; 3. The condition must be precise; The condition must be enforceable; The condition must be reasonable.
DCO 1.168	The Applicant, MMO	Sch 20, Pt 3 para 39. This has been deleted. What process is now proposed for UXO clearance? Please will the MMO state whether or not it agrees with that process.	The MMO consider that Unexploded Ordnance (UXO) activity should be provided for by a separate consent outside of the DML. The MMO agree with the removal of UXO activity from the DML on the understanding that a separate Marine Licence will need to be sought.
LI.1 Landscape impact, visual effects and design			
LI 1.58	ESC, SCC, MMO, Natural England and AONB Partnership	Temporary Beach Landing Facility – Assessment (Change 2) Are you satisfied with the findings of effects relating to the temporary BLF detailed in section 2.8 [AS-181] as compared to the judgements in [APP-216]?	The MMO defer comments on visual impact to Natural England and the Area of Outstanding Natural Beauty (AONB) partnership.



Ma.1 Marine water quality and sediment			
Ma 1.0	The Applicant, MMO, EA	Para 21.2.8 Section D, eel management plans. Please explain further the importance in legal and policy terms, of the relevant plan, any non-compliance arising from the Proposed Development, and what is in place should the Proposed Development be non-compliant.	The MMO defer to the Environment Agency as the appropriate body to comment on this subject.
NV.1 Noise and Vibration			
NV 1.81	ESC, SCC, Natural England, MMO	Conveyor on BLF The Applicant has introduced reference to a conveyor system for the BLF. Do you consider the assessment of this in respect of noise is adequate?	The MMO advises that the operation of the conveyor will be a source of airborne noise. Typically the source level noise for conveyors is low, and while it will be a regular and frequent source of noise during construction, there is evidence from other construction projects that receptors such as birds rapidly habituate to such sources of background noise. The MMO, within our remit, does not consider the potential impacts to be significant.
NV 1.86	Natural England, MMO	Noise Effects on Marine Mammals (i) Do you agree that the Applicant's assessment of noise effects from the additional piling on porpoise and other marine mammals can be regarded as not significant? (ii) Are you satisfied with the mitigation proposed and how this would be secured through the DCO? (iii) Do you consider the monitoring throughout the construction period would provide adequate safeguards?	The MMO considers the Applicant's assessment to be broadly robust. In commenting on the ES Addendum, we recommended that the Applicant clarify the modelling approach used, the worst-case assessment (potentially 4 piles being inserted concurrently) and confirm that the assessment covers a realistic worst-case scenario. We also recommended that the Applicant clarifies the potential underwater noise effects of any mechanical cutting of piles during decommissioning of the temporary BLF. The MMO are satisfied with the proposed mitigation and monitoring, and that this can be secured through the DML.



R.1 Radiological considerations			
R 1.14	The Applicant, ONR, EA, MMO	<p>Sea Defences There is concern identified by a number of RRs e.g.(RR 0038) regarding the ongoing maintenance of the sea defences beyond the lifetime of the operation of the plant when it is reasonable to assume ILW, Spent Fuel and LLW may well continue to be stored on site.</p> <p>(i) What is proposed to be in place to ensure the integrity of the sea defences in the longer term?</p> <p>(ii) How should the integrity of the defences be monitored through the lifetime of the plant?</p> <p>(iii) How is this to be secured through the DCO process?</p>	The MMO believes that this question is for the Applicant. We note that we have not yet received a copy of the Applicant's response to this question and so have no comments to add at this stage.
R 1.15	ONR, EA, MMO	<p>Sea Defences In the event the power station operated beyond 60 years as referenced in a number of the ES documents what implications if any would this have?</p>	Regarding implications from an MMO perspective, as the seaward limit encroaches landward, the High Mean Water Spring mark moves, and as such, more activities may become marine licensable.

