Hornsea Project Four

Written Summary of the Applicant's Oral Case at Issue Specific Hearing 10

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1 Introduction

1.1.1.1 Issue Specific Hearing 10 (ISH10) on the marine processes and ecology (excluding ornithology) matters for the Hornsea Project Four Offshore Wind Farm took place on 20 July 2022 at 09:30 am and was held virtually, with attendees attending via Microsoft Teams.

1.1.1.2 The ISH10 broadly followed the agenda published by the Examining Authority (the ExA) on 11 July 2022 (The Agenda). The ExA, the Applicant, and the stakeholders discussed the Agenda items which broadly covered the areas outlined below.

- marine geomorphology and process modelling;
- marine and coastal ecology and effects (including benthic habitats and species, fish, shellfish and marine mammals, but excluding ornithology);
- proposed activities in the intertidal and coastal zone and their effects;
- dredge sampling, characterisation and monitoring; and
- rock protection proposals.

Table 1: Summary of the Issue Specific Hearing 10

Item	ExA Question/Context for discussion	Applicant's Response
Agenda item 1 - Welcome, introductions, arrangements for the hearing		
1	The Examining Authority ("**ExA**") opened the hearing, introduced themselves and invited those parties present to introduce themselves. The ExA representatives introduced themselves as follows: - Jo Dowling (ExA Inspector Lead) - Andrew Mahon (ExA Inspector) - Stephen Bradley (ExA Inspector) - Rod Macarthur (ExA Inspector) - Gavin Jones (ExA Inspector)	Applicant The representatives for the Applicant introduced themselves as follows: - Gary McGovern (Partner at Pinsent Masons LLP) - Dr Julian Carolan (Consent Project Manager at Orsted) - Dr Lauren Kirkland (Principal Environmental Consultant at GoBe Consultants) - Phil New (GoBe Consultants) - Rachel Sinclair (SMRU Consulting) - Bill Cooper (Coastal Process Specialist, Cooper Marine Advisors) Marine Management Organisation ("**MMO**") - Luella Williamson (Marine Licensing Case Manager at MMO) - Gregg Smith (Marine Licensing Case Officer at MMO) - Jon Rees (Principal Physical Oceanographer at Centre for Environment, Fisheries and Aquaculture Science ("Cefas") Holderness Fishing Industry Group ("**HFIG**") - Dr Mike Roach (Scientific Officer at Holderness Fishing Industry Group ("HFIG")
1	The ExA noted that Natural England ("**NE**") made a second submission in lieu of attendance at this Issue Specific Hearing 10 (AS-48) and the ExA shall consider its use at Issue Specific Hearing 11 and 12. The ExA acknowledged work being done by the Applicant and other interested parties in parallel, particularly in relation to the ornithological baseline, which is to be discussed at Issue Specific Hearing 11. The ExA asked if there were any comments on the introduction.	*No comments on general introduction.*
Agenda item 2 – Geomorphology and marine process modelling		

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2.1	The ExA asked the Applicant whether NE's concerns over the effects of climate change and particularly the continuing erosion resulting from infrastructure retained in the intertidal zone and the landfall beyond the lifetime of the project was still under discussion between the Applicant and NE (and potentially the MMO) or whether an agreed position been reached.	Mr McGovern, on behalf of the Applicant, confirmed that there are no ongoing active discussions in relation to that specific point in relation to assets at the landfall location and there has been no change in the Applicant's position. Mr McGovern flagged that the NE's concerns now appear to relate to assets remaining in situ beyond the operational lifetime of the project. The Applicant's view is that this matter would be appropriately dealt with by way of the decommissioning plan that's already secured by way of the development consent order ("**DCO**") (see requirement 24 of Part 3 of Schedule 1 and paragraph 6 of Part 1 of Schedule 12). The ExA asked if the Applicant would liaise with NE to get confirmation of this conclusion in the Statement of Common Ground ("**SoCG**"). Mr McGovern, on behalf of the Applicant, re-iterated that East Riding of Yorkshire Council ("**ERYC**") is satisfied with the position in relation to the landfall and intertidal area and that, as per its relevant representation response, the Environment Agency ("**EA**") have also looked at the wave modelling on the implications of coastal erosion and have declared itself satisfied with the work done by the Applicant. Mr McGovern then passed to Dr Carolan who added, on behalf of the Applicant, that the Applicant has monitored coastal erosion rates along the ERYC coastline. This identified that the maximum coastal erosion rate of 1.8 metres per year over the analysed period of the last 50 years. This has been used to calculate the transition joint bay and entry pit setback from the active coastal zone. This has been applied against the 35-year project lifetime with a climate change allowance of a 50% exceedance to that to get a setback of 240 metres from the cliff. **Post Hearing Clarification provided in Action Point 1** Dr Carolan, on behalf of the Applicant, confirmed that the Applicant does not therefore foresee any changes to coastal erosion rates that have not been accounted for. Dr Carolan added that the project description includes a detailed definition of the horizontal directional drilling ducts which are anticipated to be no shallower than 40 metres below the beach (**Post Hearing Clarification provided in Action Point 1**). Dr Carolan suggested that it would be highly unlikely to get 40 metres of beach lowering irrespective of climate change storm induced processes and therefore the Applicant's view is that it has designed climate change

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		and coastal erosion rates into the project from the offset which is all documented within the application. Mr Rees agreed that the average erosion is 1.8 metres of the 35-year lifespan but responded that erosion is very episodic along the particular coastline which imposes a need to have procedures in place so that if accelerated erosion does take place, the cables can be re-buried. Mr Rees concerns related to the intertidal burial of cables. Mr McGovern, on behalf of the Applicant, responded that Mr Rees's comments seemed more related to Smithic Bank as opposed to the profile of the beach, although he understood that Mr Rees agrees that caballing installed to a depth of 40 metres would not give rise to any issues. The ExA summarised that there may be some disagreement between the Applicant and the MMO about the depth of the burial of the intertidal. Mr McGovern agreed that the Applicant and MMO would discuss this outside of the hearing.
2.2	The ExA categorised the reviews received on marine processes and monitoring under three areas: 1. Smithic Bank; 2. Flamborough Front; and 3. The implications for the benthic ecology baseline and assessment The ExA summarised that there has been a series of documents entered into the examination recording the evolution of these matters, whereby NE and the MMO have expressed a series of concerns and the Applicant has submitted a Marine Processes Supplementary	Mr McGovern, on behalf of the Applicant, confirmed that was a fair summary.

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	Report (REP4-043), which looks particularly at Smithic Bank and Flamborough Front. The ExA's interpretation of the overall conclusion of the supplementary matters assessed for Smithic Bank and Holderness Coast seem to be the effect of installing cable protection on nearshore sediment transport pathways would be negligible to minor. The ExA asked if the Applicant agrees that with the ExA's summary.	
2.2	The ExA asked the Applicant for a point of minor clarification that the references in several places in Section 3.3 of the Clarification Note on Marine Processes Mitigation and Monitoring (REP5a-017) to REP4-114 should be to REP5-114.	Mr McGovern, on behalf of the Applicant, confirmed that was correct.
2.2	The ExA asked the Applicant for a summary of its position in relation to cable protection for Smithic Bank and how it is to be secured through the draft DCO.	Mr McGovern, on behalf of the Applicant, confirmed that the Applicant's position remains a maximum design scenario for cable protection of up to 5% of the length of the cable within the boundary of Smithic Bank, as presently defined, which is secured in the updated deemed marine licence (REP5-036) through Condition 3 of Part 2 of Schedule 12 of the draft DCO.
2.2	The ExA asked the Applicant to provide a summary of its position in relation to Commitment 189 in the Commitment Register (REP4-007), to explain the Applicant's more recent commitment to review the proposed mitigation when all the necessary information is available and how such mitigation would be secured.	Mr McGovern, on behalf of the Applicant, answered that this particular commitment would be secured by means of the Outline Offshore Cable Specification and Installation Plan (APP-250). Mr McGovern also clarified that the commitment at this stage is to ensure that the crossing point is at least 20 metres east (seaward) of the Smithic Bank boundary which would ensure that the Dogger Bank crossing does not encroach on the Smithic Bank boundary. Mr McGovern noted that once other information and the understanding of the actual positioning of the Dogger Bank crossing is crystallised, the location may move further offshore, although the Applicant cannot commit to that until the final 'as built' position of the Dogger Bank cabling is known. Mr McGovern, on behalf of the Applicant, also noted that further decisions are outstanding in relation to the transmission technology and further risk

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		assessment work to be done that would inform such decisions, which would happen post consent. The ExA then queried whether (APP-250) has been updated. Mr McGovern, on behalf of the Applicant, said it has not been updated yet but confirmed that it would be updated by Deadline 6.
2.2	The ExA asked the Applicant if it intends to incorporate some of the monitoring proposals for Smithic Bank included at Table 6 and Section 4 of (REP5a-017) into an updated Outline Marine Monitoring Plan (APP-242) by Deadline 6.	Mr McGovern, on behalf of the Applicant, confirmed that the Applicant intends to incorporate Table 6, Table 7 and Table 8 into an updated version of the Outline Marine Monitoring Plan (APP-242). However, Mr McGovern advised that due to the recent submission of NE, then the Applicant would submit the updated plan at Deadline 7 to allow time to properly consider NE's submission.
2.2	The ExA asked the MMO if it had any comments in relation to Smithic Bank and the proposed mitigation.	Ms Williamson passed over to Mr Rees who said, on behalf of the MMO, that the MMO and the Applicant are seemingly now at a mutually agreed position in relation to the location of the crossing point between the Dogger Bank and Hornsea Four export cables. Mr Rees added that as the parties agreed that the crossing point is going to be 2.9 kilometres from the northern crossing points and about 3.6 kilometres from the southern crossing points, it is less of an issue for the MMO due to evidently good separation. Mr Rees continued that in terms of the proposed 5% protection, the MMO would want to see justification for the location of that and the Applicant's reasons for why that volume needs to be placed. Ms Williamson clarified this point, that whilst the MMO are aiming to provide comments at Deadline 6, the MMO would like to see some tighter control around the rock deployment in Smithic Bank. The MMO would like to have sight of detailed pre-construction surveys and cable burial risk assessments before construction commence to show the exact percentage of cables to be buried. Ms Williamson, on behalf of the MMO, continued that the MMO support NE's proposals that the Applicant carries out additional monitoring. The MMO have advised that a high-resolution pre-construction survey is undertaken, to be followed by a post cable installation survey every six months for the first two years (over two winter and two summer periods)

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		and then a further survey every five years for the duration of the project. The aim is to allow comparison reports with the existing bathymetry survey data, to align with what the Applicant has already undertaken. Mr McGovern, on behalf of the Applicant, raised the apparent differences between the views of the NE and the MMO. Namely, NE have said that there should be 0% cable protection whereas it is understood that the MMO have suggested in the hearing today that 5% is acceptable, with tighter controls. Although Mr McGovern confirmed that the Applicant would consider how tighter controls and monitoring could be implemented as per MMO's comments. The ExA suggested that the Applicant, NE and MMO discuss the discrepancies between them and queried whether it is likely to be resolved by the close of the examination. Mr McGovern, on behalf of the Applicant, acknowledged that it is unlikely the Applicant and NE will reach full resolution but the Applicant will endeavour to make the positions more aligned, and is more hopefully of resolution with the MMO on the basis the Applicant and the MMO are already more closely aligned and the MMO is the regulatory lead. Ms Williamson, on behalf of the MMO, responded that the MMO's priority is for the 5% position to be driven down as much as possible, so in that sense they align with NE but appreciate that there are more operational nuances involved. The ExA confirmed its understanding that the MMO would prefer 0% but due to realities that cannot be avoided, it would prefer to see evidence that up to 5% is still required to be dealt with by the marine licence. This was confirmed by Ms Williamson. Mr Rees noted that Dogger Bank A and B are going across this zone in the next year or two, so indicative information should become available.
2.2	In relation to Flamborough Front, the ExA asked the Applicant to confirm that the results of the near-field monitoring proposals in Table 7 and Section 4.4.2 of (REP5a-017) will be used to decide whether additional far field monitoring is also required. The ExA also asked the Applicant	Mr McGovern, on behalf of the Applicant, confirmed that was correct.

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	that should the near field monitoring confirm turbulent wakes in exceedance of those predicted in the Environmental Impact Assessment ("**EIA**"), would this result in the additional monitoring set out in Table 8 and Section 4.4.3 of (REP5a-017).	
2.2	The ExA asked the Applicant how any trigger for the instigation of far field monitoring would be established.	Mr McGovern passed on to Dr Carolan who said, on behalf of the Applicant, that if monitoring confirmed that the extent of turbulent wakes as used exceeded what was assessed in the EIA, then that would require further monitoring. Dr Carolan continued that the Applicant would clarify this in in the updated version of the Outline Marine Monitoring Plan (APP-242) although the Applicant is first waiting for further clarification by NE. The ExA requested that the figures be carried through from the environmental statement ("**ES**") into (APP-242) to show what would trigger far field monitoring.
2.2	The ExA asked the Applicant whether the monitoring put forward fully addresses the requests made by NE for a programme that would record any changes to stratification and primary productivity during pre-construction and post-construction and for the lifetime of the project.	Mr McGovern, on behalf of the Applicant, said that the Applicant's monitoring proposals do not align with exactly what is being asked for as the Applicant does not propose to undertake monitoring for the lifetime of project. Instead, Mr McGovern confirmed that a standalone report will be prepared covering a pre-construction baseline characterisation for a period of one year, one year during construction and one year post-construction. The Applicant said that it would consider whether this is sufficient to cover the natural variation that may exist given the physical process conditions. However, in the meantime, Mr McGovern provided that the monitoring being proposed is reasonable, proportionate and appropriate in the context of an undesignated feature and where the scale of the impacts has been assessed as negligible.
2.2	The ExA asked whether the overall monitoring package allow for series of trigger points to allow for any interventions or remediations if required.	Mr McGovern, on behalf of the Applicant, said there are no interventions or remedial proposals as a result of the far field monitoring as proposed in Table 8. The Applicant acknowledged this is another area of difference with NE as it cannot agree to NE request in this regard. However, the Applicant added that monitoring proposals set out in Table 6, Table 7 and Table 8 will be incorporated into an updated version of the Outline Marine Monitoring Plan (APP-242), to be submitted at Deadline 7. Mr McGovern, on behalf of the

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		Applicant, confirmed that this plan, as secured by the DCO would secure the near field and far field monitoring proposals. Mr Rees, on behalf of the MMO, welcomed the Table 8 proposals but suggested that the far field effects should be driving the near field monitoring. Mr Rees referred to Professor Elliot's peer review [REP5-066] which emphasises that Flamborough Front has considerable variability in its position, its strength, and the meanders that the front exhibits. The MMO would therefore want to see the far field impacts being used as a reconnaissance tool to identify those particular gravity-based structures in total that exhibit some of these features (or don't). For example, the MMO suggested that the assessment includes the Sentinel Three which is useful for identifying the variability in terms of where the position of the front as well as Land Satellite 8 and Land Satellite 9 as they go down to 100 metre resolution and, when combined, they have a 16 day repeat period. The ExA clarified that Mr Rees was suggesting that feedback from far field monitoring feed back into near field monitoring. Mr Rees, on behalf of the MMO, confirmed yes.
2.2	The ExA asked whether the MMO believe there is a difficulty that the proposal is only to undertake near field monitoring unless there is an exceedance of the predictions on the basis of Mr Rees's comments that there is variability potentially not just in the position of the front, but also between the gravity-based structures that are used.	Mr Rees, on behalf of the MMO, responded that that is the key reason for the reconnaissance survey, to identify those likely positions at a relatively low cost, high resolution. Ms Williamson added that in opposed to monitoring three distinct locations, the MMO would rather see the monitoring of the full array first at a time to see full stratification (i.e. Spring, Summer and Autumn). Ms Williamson advised that the MMO will await the first set of monitoring data to review before the MMO can assist the Applicant with more refined monitoring proposals going forward. Mr McGovern, on behalf of the Applicant, stated that its understanding is that a particular issue is the gravity-based foundations, which are not proposed across all of the array. In fact, the number of gravity-based foundations has been further reduced in the Applicant's recent submission. Mr McGovern re-iterated that it is entirely logical and reasonable to determine and validate whether the EIA conclusions at near field scale are correct before moving onto far field.

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		Mr Cooper, on behalf of the Applicant, added that it is a good idea to carry out survey planning where the effort to be undertaken at the near field is timed with the development of stratification and the locations to be sampled are within the area of satisfaction. However, Mr Cooper noted that the potential limitation here is that a survey would be prepared, ready to response to that reconnaissance level, then cloud cover could negate the potential use of that data. Therefore, the Applicant is conscious of having to push back the survey due to too much cloud cover. Mr Cooper continued that if information is to be shared with others, then a fairly immediate turnaround would be required from the MMO to ensure the validity of the reconnaissance is maintained. Mr Cooper confirmed that the Applicant cannot rely on these practicalities of dependence. However, in response to the ExA's request, Mr McGovern confirmed that the Applicant would consider the MMO's comments and look to alter the scope of the current proposals where possible as well as responding to any relevant comments from NE by Deadline 7.
2.2	The ExA asked the Applicant and the MMO whether they believe that the additional detail and information which has been submitted over recent deadlines, including the marine processes supplemental report, has any implications for the benthic ecology baseline and assessment	Mr McGovern, on behalf of the Applicant, stated the Applicant considers no implications but the Applicant has made further efforts to reduce certain aspects of the design, and those would reduce impacts such as they may arise. Ms Williamson, on behalf of the MMO, said they aim to provide comments by Deadline 6. The ExA also requested that NE should respond to the same question.
2.2	The ExA asked the Applicant whether there should be, or is, any material implication from the omission of the Christiansen et al. (2022) and Dorrell et al. (2022) papers in the Applicant's report (REP4-043).	Mr McGovern, on behalf of the Applicant, said that he understands that the Applicant has considered those papers in Action Point 7
2.2.	ExA asked the Applicant whether its intention was to resolve any outstanding differences with NE in relation to marine processes,	Mr McGovern, on behalf of the Applicant, recognised that the Applicant has gone as far as possible with all appropriate receptors having been identified and assessed under the EIA process. Mr McGovern referred to Professor Elliot's peer review to support this too as Profession Elliot agreed that the appropriate receptors were identified.

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		The ExA requested clarity in terms of process though and presumed that the Applicant remains in consultation with NE. Mr McGovern, on behalf of the Applicant, confirmed that the Applicant is still engaging with NE through the SoCG. The Applicant will review NE's submission (AS-048) and continue to use best endeavours to close out any issues as far as possible prior to the close of examination, although Mr McGovern acknowledged that there will be outstanding issues.
2.3	The ExA asked the Applicant for a succinct summary of the Applicant's understanding of the purpose of the Professor Elliot's peer review (REP5-066) and if anything further is expected from Professor Elliot.	Mr McGovern, on behalf of the Applicant, passed to Dr Carolan who explained that the independent review was requested by the Applicant to aim to achieve a centralised position around which the parties could coalesce. The first phase was for Professor Elliott to review the application documents in terms of their adequacy and sufficiency of assessment and whether they had any key concerns, then to review the MMO and NE relevant representations, and finally to review that and the Royal HaskoningDHV has gone in scope of works. After these reviews, Professor Elliott was instructed to draft an independent report outlining his comments. Dr Carolan confirmed that the appointment of Professor Elliot had been clarified at a technical panel meeting where Mr Rees and NE welcomed Professor Elliot. Dr Carolan also confirmed that the peer review (REP5-066) is the final report expected from Professor Elliot. Although under the monitoring and mitigation report (REP5a-017) there is scope for Professor Elliott to chair a workshop if the parties continued in divergent positions with the intention of then making a Deadline 7 submission.
2.3	The ExA noted that Professor Elliot's report was to provide an independent peer review of the Applicant's independent Marine Processes Supplementary Report (REP4-043) but queried that the peer review does not seem to focus on this supplementary report. The ExA therefore asked the Applicant whether the information in (REP5-066) is still relevant.	Mr McGovern, on behalf of the Applicant, clarified that Professor Elliot was involved in reviewing the scope of work by Royal HaskoningDHV and had full access to all documents. Although, as it was an independent report, the Applicant did not seek to restrict the issues for Professor Elliot to comment on. Mr McGovern appreciated ExA view that position has moved on in some regards, whilst many issues commented on still remain relevant as they remain issues but were raised by NE at the relevant representation stage.

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2.3	The ExA directed the Applicant to section 2.6.1.2 and section 2.6.1.4 of Professor Elliot's report to demonstrate the difficulty the ExA had in distinguishing between the summary of the NE position and Professor Elliot's personal opinion as the independent reviewer.	Mr McGovern, on behalf of the Applicant, thanked the ExA for identifying these points which the Applicant has considered in Action Point 8.
2.3	The ExA asked the Applicant whether it was necessary to update the marine processes supplemental report to take account of the published paper by Timko et al (2019) which is referenced in Professor Elliot's report in relation to Flamborough Front.	Mr McGovern, on behalf of the Applicant, confirmed that the Applicant does not believe that was an omission on its part as it was another paper that the Applicant was aware of but did not consider it to be central to the assessment undertaken. The Applicant provides consideration on this paper and its relevance to the marine processes work undertaken to date and the extent that it necessitates update below. Timko, P.G. et.al., (2019). Assessment of shelf sea tides and tidal mixing fronts in a global ocean model. Ocean Modelling 136: 66- 84. This paper considers outputs from a global 3-D application of the HYbrid Coordinate Ocean Model (HYCOM) model and compiled data sea surface temperature (SST) data. Data comparisons are made for the period of June-July-August (JJA). The paper suggests that the Flamborough Front is well-represented in the HYCOM simulation (with tides) but the predicted location of the front lies somewhat north of the position predicted by other models and data. The paper further serves to illustrate the difficulties in accurately representing the Flamborough Front with modelling tools (i.e. differences in location shown between models) as well as how to represent the feature in a generic way when the feature is itself is transitory. Professor Elliot refers to Timko et al (2019) to make the point that the Flamborough Front is not a discrete feature. The absence of Timko et al (2019) from the Marine Processes Supplementary Report is not considered a shortcoming. The Marine Processes Supplementary Report refers to Miller et al (2014) which is based on real observations (considered superior evidence to model outputs) and also shows the spatial variance of the Flamborough Front over 10-year period and split between seasonal periods.

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		No update is identified or required.
2.3	The ExA also asked the Applicant whether, other than the emergency beach access ramp referred to in Professor Elliot's report, there are any matters of difference between Professor Elliott's review and the Applicant's own position as set out in the submissions and if so, whether any updates to the ES are required as a result.	Mr McGovern, on behalf of the Applicant, said that no issues had been identified which necessitated updates to the ES. Ms Williamson passed to Mr Rees on behalf of the MMO who contributed that he agrees with the ExA observation that it is difficult to distinguish NE's and Professor Elliot's opinions. Mr Rees also raised the isolated issue at section 2.6.1.5 where Professor Elliot suggested that there is no change in the light regime due to gravity-based structures at Flamborough Front. Mr Rees suggested that this has been misinterpreted. Mr McGovern responded that the Applicant would consider whether to clarify this aspect of the report in addition to the others already highlighted to the Applicant. Having considered the variation in opinion, the Applicant has concluded that there is no requirement to update the ES or clarify the variation in opinion further.
2.4	The ExA summarised that the Applicant's position on the modelling is that, excluding Dogger Bank cable crossing, all cable crossings are in sufficiently deep water such that the waves would have no effect on the seabed and the cable crossing effects could not act cumulatively due to the large spacing between them. The ExA asked if that was accurate.	Mr McGovern, on behalf of the Applicant, confirmed, yes, that is accurate. The ExA continued that the MMO were to continue to engage with the Applicant and NE and so asked the MMO to summarise its most up to date position on the modelling and cumulative impact of cable crossings. Ms Williamson passed on to Mr Rees who confirmed that the MMO is now content that there will be no potential cumulative impact between these locations and therefore it does not need taking any further.
2.5	The ExA stated that once all parties have reviewed AS-048, the ExA may require from NE on the scope of marine process receptors.	Mr McGovern, on behalf of the Applicant, confirmed nothing further to add other than the position that the Applicant considers that all receptors have been identified and assessed.
Agenda item 3 – Fish and shellfish ecology		
3.1	The ExA, with reference to the Applicant's comments in (REP5-074), asked the Applicant whether it has been able to obtain the 2018 IHLS data which is not in the public domain.	Mr McGovern and Mr New confirmed that the Applicant has been unable to obtain the data. Mr New added that the Applicant has contacted one of the authors (ICES) directly requesting this data, but has yet to receive a reply. The Applicant is unable to give any indication of whether the data is likely to be available before close of examination. However

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		Mr New re-iterated that the existing conclusions are based on 14 years of data so another single years' worth of data is unlikely to make any material difference.
3.1	The ExA referred to the Applicant's submission of additional information and evidence reasoning in its clarification note on peak herring spawning period and seasonal piling restrictions (REP5-049) and also in its response to the deadline for submissions. The ExA asked the MMO whether it intended to make any response or whether the MMO was still waiting for its advisors to provide additional information.	Ms Williamson, on behalf of the MMO, said that the MMO is awaiting technical advice although it is anticipated that it should be available for Deadline 6. ***Post-hearing note:*** The Applicant requested MMO and Cefas availability for a Technical Panel meeting concerning the clarification note on peak herring spawning period and seasonal piling restrictions (REP5-049) on 16/06/22. Until this meeting has been held it is unlikely the Applicant will be able to resolve the MMOs concerns.
3.2	The ExA noted the disturbance from noise and vibration and the potential for suspended sediments to be deposited on spawning grounds, which were potentially between two sources and pathways to a single receptor. The ExA asked the Applicant whether this is an instance where in project cumulative effects needed to be considered and indeed, whether they were considered.	Ms Williamson, on behalf of the MMO, confirmed its position is the same as above. Mr McGovern, on behalf of the Applicant, confirmed that the ES has a section at end of each chapter with inter-related effects that describes the different impacts on the same receptor. The ExA acknowledged this as something it would consider.
3.3	The ExA requested a summary of each of the interested parties' positions (including NE, HFIG and the National Federation Fisherman's Organisation ("**NFFO**")) in relation to the Applicant's proposed shellfish ecology monitoring campaign and whether the parties' concerns have been satisfied.	Mr McGovern, on behalf of the Applicant, confirmed that the Applicant maintains its position that the baseline was adequately characterised and therefore no further work is required. Having said that, Mr McGovern noted that the Applicant had continued to engage with each party to try and reach commercial agreement in the spirit of industry collaboration. This included the monitoring campaign which would be secured by commercial agreement. Mr McGovern confirmed that the Applicant hopes to have a final position on this third party negotiations reached by Deadline 6. In response to an ExA query, Mr McGovern, on behalf of the Applicant, clarified that the latest SoCG is not yet the absolute final position but that it would not be far off.

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		Dr Roach, only speaking for HFIG and not NFFO, disagreed that the baseline was adequately categorised. Dr Roach added though that the monitoring programme to directly address the concerns raised is exactly what its members want. Therefore, Dr Roach was satisfied that although the SoCG cannot be changed because the HFIG do not believe the baseline was appropriately characterised, but the HFIG welcome the collection of further data in the spirit of industry collaboration.
3.3	The ExA then said if it were to assume that the satisfaction of the HFIG and NFFO is dependent on the agreement of a shellfish ecology monitoring campaign, whether the Applicant could provide a timeline for when this will be agreed, how and when it's going to be submitted into the examination and how the Applicant envisages it being secured through any DCO.	Mr McGovern, on behalf of the Applicant, said that a concluded position is hoped by Deadline 7 with the ExA to be updated. However, Mr McGovern re-iterated it would be secured by commercial agreement and not in the DCO. The ExA further questioned the Applicant that given NE's similar concerns, how would this be progressed with NE. The Applicant said that the concerns were not shared, and the Applicant has confidence in the adequacy of baseline. However, it would be dealt with in the NE SoCG. Mr McGovern raised that the Applicant would close out the issue where possible, although noted that it may not be possible.
Agenda item 4 - Control of impacts on marine mammal		
4.1	The ExA noted that it understands that NE and the Applicant have come to an agreement to revisit permanent thresholds when finalising the mitigation measures in the marine mammal mitigation protocol, should they ought to be made. The ExA asked the Applicant to confirm this was a fair summary.	Mr McGovern, on behalf of the Applicant, confirmed that this was fair summary of the position but invited Mrs Sinclair to confirm. Mrs Sinclair confirmed that both NE and the Applicant are in agreement that any new methods to model shall be taken into account post-consent. Mrs Sinclair confirmed that the Applicant intends to submit an updated Outline Marine Mammal Mitigation Protocol (APP-240) at Deadline 6. ExA asked whether the Applicant is satisfied that the changes to the Outline Marine Mammal Mitigation Protocol will be adequately secured through the DCO. Mr McGovern, on behalf of the Applicant, confirmed yes. ExA asked the MMO whether they have been party to these discussions. Ms Williamson said the MMO have obtained updated technical advice and will provide comments in full by Deadline 6. However, in the meantime, Ms Williamson offered a brief summary of the position that although there are some uncertainties and conservatism with estimating the weighted cumulative sound exposure, the requirement to implement mitigation based on

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		the cumulative Permanent Threshold Shift remains. Ms Williamson, added that dual noise exposure criteria is to be used but support noise mitigation measures.
Agenda item 5 – Activities in the coastal and intertidal zone		
5.1	The ExA noted that Professor Elliot addresses the proposed temporary access ramp and the potential for causing sediment build up and cause costal erosion. The ExA asked the Applicant how far the proposed temporary access ramp could be constructed in line with the work plans and draft DCO, and whether the intention is to define a maximum design scenario that ensures that the ramp would fall within the parameters that were assumed when the assessment was made.	Mr McGovern, on behalf of the Applicant, appreciated that the position has become confused due to issue with offshore works plan that have since been corrected. However, Mr McGovern confirmed that the fundamental position has remained unchanged and the location and extent of the maximum design scenario for the ramp has been consistent throughout and has been assessed accordingly in the EIA, in particular in the context of marine processes. The (corrected) works plan (offshore), show that the location of the ramp would extend into the upper intertidal area (i.e. beyond MHWS) but no further than the mean high-water mark. Mr McGovern added that the ramp could be located anywhere within the area identified on the works plan (offshore) and the location shown on figure Inset C (Appendix A, REP4-038] was indicative, but it would be no more than 10m wide and no longer than 30m and would be only in the upper intertidal but not below mean low water mark. The ExA requested where there is coverage of the points raised by the Applicant in the ES. Mr McGovern, on behalf of the Applicant, said that this confirmation would be given in writing by Deadline 6 (see response to Action Point 12.
5.1	The ExA asked the Applicant whether there is any difference between the Applicant's assessment, Professor Elliott's statements in his report in relation to this, and then the potential for coastal erosion downstream.	Mr McGovern, on behalf of the Applicant, confirmed that no, the Applicant does not take any issue with what Professor Elliott set out in respect of the temporary beach access ramp. The Applicant acknowledged the fact that there is some sediment blockage effects upstream and some erosion affects downstream but those matters were considered and informed the Applicant's assessment and its conclusion as to no significant effect. Ms Williamson, on behalf of the MMO, confirmed nothing further to add.
5.2	The ExA said that unless any other interested party had something to add, there would be an action point on NE only to provide updated view on the reinstatement proposals for Horizontal Directional Drilling exit pits.	Mr McGovern, on behalf of the Applicant, said that nothing further to add but acknowledged discussion in the DCO hearing earlier in the week in relation to updating the cable installation plan to include some text on this matter.

Item	ExA Question/Context for discussion	Applicant's Response
		Ms Williamson passed on to Mr Rees. Mr Rees, on behalf of the MMO, confirmed that the MMO have the same concerns as NE about the potential use of rock in the sub-tidal zone as it is a material not usually used in this location. However Mr Rees suspects that unlikely in practice to be any reinstatement issues as the pits will largely recover through natural restoration methods.
Agenda Item 6 – Dredge sampling, characterisation, contamination analysis and ongoing monitoring		
6.1	The ExA commented that the Applicant has detailed the laboratories that had completed the contaminant analysis and the particle size analysis and also that the ExA understands that Applicant believes that all of the contractors used are validated by the MMO and that this information has been sent in the prescribed format to the MMO ahead of Deadline 5. As such, the ExA asked the Applicant whether it believes that all of the outstanding queries and concerns are addressed and that the MMO should now be in a position to comment on your results.	Mr McGovern, on behalf of the Applicant, confirmed that is correct. Ms Williamson, on behalf of the MMO, confirmed that the Applicant has addressed most of its comments. However, the laboratory that carried out the particle size analysis (PSA) remains an outstanding issue as it is not currently an MMO validated laboratory. Mr McGovern, on behalf of the Applicant, contributed that the Applicant will check the validation status of the particle size analysis laboratory and will endeavour to confirm by Deadline 6. ***Post-hearing note:*** Following the MMO's confirmation at issue specific hearing 10 that the contractor that undertook the PSA for the array area was not a laboratory validated by the MMO, the Applicant has looked into this further and made enquires with Gardline and have established that Gardline subcontracted the PSA analysis to Thomson Ecology, a laboratory not currently validated by the MMO. The Applicant would like to highlight that the survey report for the benthic sampling at the array area was provided within Appendix A of the Benthic and Intertidal Ecology Technical Report (Hornsea Four Offshore Wind Farm Lot 6 GP1a Array Area, Habitat Classification Report (Gardline, 2019)) as part of the PEIR in August 2019. Within this appendix, detailed information on both the methodology and the contractor for the PSA analysis is presented in page 174, with the following statement "Particle size analysis (PSA) was conducted by Thomson Ecology in accordance with NE Atlantic Marine Biological Analytical Quality Control (NMBAQC) methods for diamictons (Mason, 2016)." The MMO provided detailed comments on the benthic and intertidal ecology elements of the PEIR, including specific

Item	ExA Question/Context for discussion	Applicant's Response
		comments related to the array area PSA, with no comments flagging this issue with PSA contractor validations. The Applicant considers that this mandate for all PSA laboratories to be validated by the MMO should have been raised at that time rather than being flagged at this late stage in the Examination process. The Applicant also highlights that consultation with the MMO was undertaken through the Evidence Plan Process, with PSA methodologies presented within the Hornsea Four Benthic and Intertidal Ecology Survey Strategy (ref. 01489942_A) which was submitted to the Evidence Plan on 25/02/19. Within this strategy, Section 4.3.4 stated that the PSA would be compliant with the latest NMBAQC guidance. A response to this strategy was received from the MMO on 28/03/19 and the Applicant would like to highlight that the MMO's comments did not state that the associated PSA laboratory needed to be MMO validated. The Applicant notes that the requirement of PSA laboratories to be validated by the MMO appears to be a relatively recent development, with very few laboratories validated by the MMO at the time of the array area sampling campaign in 2018. Although **the Applicant will use reasonable endeavours to accommodate the MMO's late request to retrospectively apply their current approach to accredited laboratories within the timescales of the Examination** (noting samples have been frozen for approximately four years so quality could be compromised), the Applicant would encourage the MMO to effectively communicate this requirement to other offshore windfarm developers currently collecting data to inform their subsequent EIAs. Furthermore, the Applicant notes that the requirements for MMO validation are largely reliant on the laboratories participating in the NMBAQC scheme, which Gardline and Thomson Ecology are. The Applicant also notes that for offshore wind farm developments, adherence to the NMBAQC Scheme Best Practice Guidance has been the industry standard for analysis to inform disposal requirements within project Order limits, as well as marine processes, benthic ecology, and fish and shellfish ecology assessments. In relation to Thomson Ecology, the Hornsea Four samples were analysed according to NMBAQC Scheme Best Practice Guidance and they participate in the NMBAQC PSA ring test to ensure the accuracy of the data produced. Using standard (ISO3310-1/BS410-1) half-phi sieves

Item	ExA Question/Context for discussion	Applicant's Response
		they grade sediments according to the current specification from Cefas. As such, the Applicant considers that the PSA analysis for the array area is fit for purpose, meeting current industry standards as agreed through the Hornsea Four Evidence Plan Process, and that the results from this analysis are suitable to satisfy the MMO requirements for disposal within the Hornsea Four Order limits.
6.2	The ExA asked the Applicant whether it is still awaiting advice from the MMO on the required frequency of monitoring of sediments during construction.	Mr McGovern, on behalf of the Applicant, confirmed that is correct. Ms Williamson, on behalf of the MMO, confirmed that in light of its position in relation to the accredited laboratory under agenda item 6.1, the MMO is unable to comment on the actual analysis at present as it depends on the level of contaminants as to whether the required frequency of monitoring is three or five years. Once the accredited laboratory is sorted, the MMO can advise further on the regime for sampling required. Mr McGovern, on behalf of the Applicant, confirmed that the Applicant will certainly look at that. Mr McGovern also clarified that the validity issues relates solely to the particle size analysis and not the contaminant analysis therefore the Applicant does not believe it should delay the advice from the MMO on the contaminant analysis. Ms Williamson, on behalf of the MMO, confirmed that she will request from all specialists whether they are able to offer such analysis although Ms Williamson was cautious that the issue might relate to the full suite of confirmed laboratories being required to enable the MMO's confidence in its data. ***Post hearing-note:*** The Applicant considers it important to draw the Examining Authority's attention to the standard industry approach that is followed in relation to site characterisation to inform disposal licencing for offshore wind farm projects. It is commonplace for samples to be collected in advance of the EIA, in order to inform the assessments required to support a development consent application. Samples are therefore routinely taken between 5 and 8 years prior to construction (and in some cases in excess of this) with no validity period imposed, nor requirement to re-sample on an ongoing basis. An accepted exception to this

Item	ExA Question/Context for discussion	Applicant's Response
		is where there are known areas of high potential for excess contaminants, where additional sampling may be required in the event that works are to take place in the vicinity of the contaminated area (on the basis that there is a need to consider further the risk of contaminants being remobilised). With regard to the Hornsea Four Order Limits, there is no evidence to suggest that there is a high potential for sampling results to show high levels of contaminants that would lead to significant concern. As such, the Applicant does not consider ongoing sampling of sediment to be necessary. At issue specific hearing 10, the MMO noted that a condition related to the timing of sediment sampling had been included in the East Anglia ONE North and East Anglia TWO development consent. The Applicant would like to highlight that it appears the inclusion of these conditions is not related to ongoing sampling or OSPAR requirements, but specifically relates to disagreements between the developer and the MMO in relation to the methodology used to collect and analyse the samples to inform the EIA. This disagreement appears to have been resolved with agreement on the need for the survey to be redone pre-construction and is therefore not applicable to Hornsea Four. As such, the Applicant maintains that no further sediment sampling is required and that we are still unaware of any condition having been included in other recent offshore wind farm DCO related to ongoing sampling or adhering to OSPAR requirements.
6.3	The ExA noted that NE had been unable to review the Applicant's Clarification Note on Drill Arisings and Deposited Sediments (REP5-083), but asked the MMO whether it has been able to see this report and has anything to add.	Ms Williamson, on behalf of the MMO, said that the comments have been addressed by the Applicant in its report so the MMO will respond to any further comments raised by NE at Deadline 6, if applicable.
Agenda Item 7 – Rock protection maximum design scenario		
7.1	The ExA were satisfied that this was adequately covered earlier in this Issue Specific Hearing 10 and at the DCO specific hearing but asked if any interested party had anything further to add.	*No response.*
Agenda Item 8 – AOB		

Item	ExA Question/Context for discussion	Applicant's Response
	The ExA confirmed no other business from their perspective and queried whether any interested party has any further points to raise in relation to the points from this agenda.	Ms Williamson, on behalf of the MMO, added a final point of clarification and confirmed to the ExA that the Dogger Bank A and B export cable corridor is not an open disposal site currently. As such, Ms Williamson confirmed this area is no longer a concern and the MMO would support the re-implementation of this area as a disposal site for Hornsea Four. Mr McGovern, on behalf of the Applicant, advised that the Applicant had been previously made aware of this by the MMO and had already reintroduced the said disposal area by way of amendments included in the deadline 5a version of the DCO.
Agenda Item 9 – Action Points		
		See Table 2.
Agenda Item 10 - Close of Hearing		
	The ExA closed the hearing at 11:46.	

Table 2: Action Points

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
1	Discuss, and provide comments on, the depth of cable burial required in the intertidal area and any allowances required to account for climate change and possible exposure.	Applicant and Marine Management Organisation (MMO)	Deadline (D) 6	The Applicant would like to clarify that they have used a cliff erosion rate of 1.43 m per year and not 1.8 m per year as quoted by Dr Carolan. Furthermore, the Applicant would wish to clarify that the depth of HDD ducts below the cliff and beach is anticipated to be 20m and not 40m as quoted by Dr Carolan. The following text clarifies the rates of coastal/cliff erosion, depth of HDD and HDD design. The average cliff erosion rate of 1.43 m/yr is based on the information provided by East Riding of Yorkshire Council Cliff Erosion Monitoring Rates, for location 16, (within the Watermill Grounds to North of Barmston). Coastal erosion rates are provided in Table A1 of Marine Processes Supplementary Report (**REP4-043**). It is noted that the Applicant has utilised only the average erosion rate (m/yr) values for the period 1989 – 2015 and not the historic values from 1852 to 1989 which are considerably lower at 0.95 m /year . It is also noted the location 16 has the highest average erosion rate within our investigation area (landfall compound), locations 14 (to the north) and 15 (to the

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
				south) within the same study have slightly lower values ensuring the values used are sufficiently precautionary. The Applicant has also utilised a 50 year time frame (1.43 x 50 = 71.5 m) for assessment as opposed the proposed construction (5 years) and operational lifetime (35 years) of the windfarm, which add an additional buffer (10 years), as the expected overall life of the windfarm, including current expected construction times (40 years). The erosion rate is used to locate the indicative location where the HDD installed ducts reach their deepest point (i.e. 71.5 m landward of the existing cliff line), which based on cliff heights at this location (~1m above beach level), the expected drill depth is 15 to 20m below the cliff, thereby well below potential exposure depths due to coastal erosion and/or beach lowering. The HDD duct entry location (at 2m below ground level within the landfall compound) is expected to be 200 - 250 m set-back from the active cliff edge due to the long radius profile of the HDD drill. Using an average erosion rate of 1.43 m/yr this gives an approximate erosion time of 140 – 175 years before the electrical infrastructure

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
				would become exposed at the maximum observed erosion rates (1989 -2021). However, this timeframe for exposure is overly precautionary because it is highly improbable (statistically speaking) that the maximum annual erosion rate observed will occur year on year for the next 50 years. Therefore, the Applicant considers the overall design approach to be reasonably conservative, without the requirement to consider maximum values, which is only based on one year and sufficiently allow for climate change impacts attributable to increased coastal erosion and storminess.
2	Review and update Outline Cable Installation Plan [REP2-031].	Applicant	D6	The Outline Cable Specification and Installation Plan **[REP2-031]** has been updated at Deadline 6 to include a) the project commitment Co189 regarding the proposed crossing point location of the Dogger Bank and Hornsea Four cables; and b) to present a plan of the seabed area within which HDD exit pits infill material could be obtained during construction.
3	Outline Marine Monitoring Plan [APP-242] to be updated to consider incorporation of a suitable trigger for far-field monitoring.	Applicant	D7	This will be provided at Deadline 7.
4	Review and update the Outline Marine Monitoring Plan [APP-242] to provide details on the extent and timescale for monitoring of wake effects on the Flamborough Front to be undertaken. Consider MMO suggestions, including	Applicant	D7	This will be provided at Deadline 7.

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
	satellite monitoring informing the near-field monitoring surveys.			
5	Provide feedback on the Clarification Note on Marine Processes Mitigation and Monitoring [REP5a-017], including the Applicant's proposals for monitoring any effects on the Flamborough Front.	The Royal Society for the Protection of Birds (RSPB) and Natural England (NE)	D6	
6	Provide feedback on any implications of the updated marine processes information for the reliability of the benthic ecology baseline.	NE and MMO	D6	
7	Provide an indication if the papers by Christiansen et al (2022), Dorrell et al (2022), and Timko et al (2019), as cited in other reports in relation to the Flamborough Front, have implications for, or should be included in, the Marine Processes Supplementary Report, with reasoning.	Applicant	D6	Please see Agenda item 2.3 above for a consideration on Timko et.al., 2019. Christiansen N. et.al., (2022). Emergence of Large-Scale Hydrodynamic Structures Due to Atmospheric Offshore Wind Farm Wakes. Front. Mar. Sci. 9:818501. This paper is offered by Natural England, MMO and Cefas as an example of recent research which indicate a potential for large-scale hydrodynamic changes due to clusters of wind farms in seasonally stratified seas. This paper is largely theoretical. Christiansen et al (2022) discusses 3-D ocean-atmosphere model results for the Southern North Sea related to the potential effects on hydrodynamics from atmospheric wind-wakes due to clusters of wind turbines. The paper is unclear if the effects of foundations are represented in

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
				the model along with turbine effects. Model validation for baseline conditions is considered for different regional areas of the Southern North Sea with a large part of UK waters represented in Area E, which achieves the lowest level of validation with a correlation value of 0.6. This level of validation is considered low, leading to higher levels of uncertainty in the model outputs. Therefore the findings should be treated with caution. Christiansen N. et.al note the strongest predicted relative effects on sea level, depth-average velocity, salinity and temperature all are apparent across the German Bight rather than in UK waters. The scale of all changes appear to remain small and are also considered to be at the limit of being measurable. Indeed, the conclusion offered in this paper identifies the magnitude of these changes is rather small compared to the long-term variability of temperature and salinity and can hardly be distinguished from the interannual variability. Christiansen N. et.al also show that the strongest potential changes in stratification are also predicted across the German Bight and the weakest across UK Waters. The location of mean tidal mixing fronts is also shown which indicates temporal variability

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
				in the position of the Flamborough Front between June, July and August. Overall this paper shows the potential for small amplitude change in hydrodynamic properties extending over a wide area due to atmospheric wakes related to clusters of offshore wind farms, however, these effects are far less apparent in UK waters than across the German Bight. Presumably, this is because seasonal stratification in UK waters is far less affected by salinity variations, whereas the German Bight is heavily influenced by major river inputs. Natural England, MMO and Cefas refer to this paper with the assertion that the impact of clusters of offshore wind farm developments on large-scale stratification could lead to significant changes in regional primary production and, in turn, marine ecosystem dynamics through turbulent mixing of the water column. Interestingly, the paper suggests a reduction in turbulent mixing attributed to atmospheric wakes. In addition, the area where effects are most apparent (but still remaining small) is the German Bight rather than in UK Waters. The absence of Christiansen et al (2022) from the Marine Processes Supplementary Report is not considered a short-coming in any respect. This paper is also not relevant to the consideration of turbulent flow wakes developing from GBS foundations

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
				and their potential effects on the Flamborough Front. Dorrell R.M., et.al., (2022) Anthropogenic Mixing in Seasonally Stratified Shelf Seas by Offshore Wind Farm Infrastructure. Front. Mar. Sci. 9:830927. doi: 10.3389/fmars.2022.830927. This paper offers a useful review of previous studies related to turbulent mixing across various scales in stratified and unstratified locations There is no discussion about the Flamborough Front and no new research is presented. Acknowledgement is given to the importance of field surveys to help validate present understanding and numerical models, and that the number of existing observations are limited. Recommendations are made for further research and modelling to represent process scales from a single turbine, an array of turbines composing a wind farm to an entire shelf sea region with multiple farms. The absence of Dorrel et al (2022) from the Marine Processes Supplementary Report is not considered a shortcoming in any respect. Most relevant studies referred to in this paper have either been considered already in the EIA or the Marine Processes Supplementary Report.

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
				Summary The absence of the three papers from the Marine Processes Supplementary Report is not considered a shortcoming. There are no implications to the conclusions already provided in the Marine Processes Supplementary Report. Importantly, the monitoring proposals put forwards by Orsted are considered sufficient to address potential near and far-field effects due to turbulent flow wakes on seasonal stratification. These proposals provide a suitable response to the monitoring programme asked for by Natural England, MMO and Cefas in their note of 14th June 2022 and based on their assertions founded on Christiansen et al (2022) and Dorell (2022).
8	Provide clarification on Professor Elliot's report [REP5-066] (e.g., paragraphs 2.6.1.2 and 2.6.1.4) in regard to whether it is NE's or his views that are being discussed.	Applicant	D6	The Applicant confirms that upon rereading the relevant parts it is our understanding that the views expressed are those of Prof Elliott and not Natural England.
9	Provide current position on the adequacy of scope of marine process receptors (if not fully covered by recent submission [AS-048]).	NE	D6	
10	Provide an updated position on the potential impacts of piling and redeposition of suspended sediment on herring spawning.	MMO	D6	

Action	Description	Action by	Deadline	Applicant's Comments/where has the action been answered
11	Submit updated Outline Marine Mammal Mitigation Protocol.	Applicant	D6	The updated **Outline Marine Mammal Mitigation Protocol** is submitted at Deadline 6.
12	Signpost where in the Environmental Statement any impacts arising from the temporary access ramp have been assessed.	Applicant	D6	RR-029-5.36 in Applicant's comments on Relevant Representations (**REP1-038**) signposts where in the Environmental Statement impacts arising from the temporary access ramp have been assessed.
13	Review the Outline Offshore Cable Specification and Installation Plan [REP2-031] and provide an updated view on the Applicant's reinstatement proposals for the HDD exit pits, which remains as an amber issue on your risk log (if not fully covered by recent submission [AS-048]).	NE	D6	See Action Point 2
14	In liaison with the MMO, confirm the position regarding the accreditation of the laboratory used for the Particle Size Analysis of sediment samples. To include the resolution of position around the frequency of ongoing sediment sampling.	Applicant	D6	Please see responses to agenda items 6.1 and 6.2 above.
15	Provide a response to the Applicant's Clarification Note on Drill Arisings and Deposited Sediments [REP5- 083] (if not fully covered by your recent submission [AS-048]).	NE	D6	
16	Respond to the written submissions and the oral evidence on the Maximum Design Scenario for rock protection across Smithic Bank and provide a final position on this matter (if not fully covered by your recent submission [AS-048]).	NE	D6	