

Hornsea Offshore Wind Farm

Project Two

Statement of Common Ground with Whale and Dolphin Conservation

Appendix P to the Response submitted for Deadline II

Application Reference: EN010053

10 August 2015

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Hornsea Offshore Wind Farm

Project Two

**Statement of Common Ground between:
SMart Wind Ltd. and Whale and Dolphin Conservation in
relation to matters raised in the Relevant Representation**

August 2015

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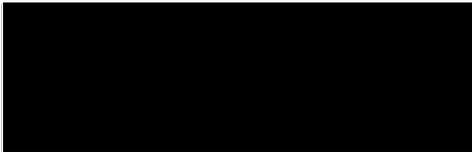
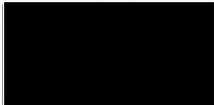
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Acronym List

Abbreviation	Definition
CIA	Cumulative Impact Assessment
CoCP	Code of Construction Practice
DCO	Development Consent Order
DEPONS	Disturbance Effects on the Harbour Porpoise Population in the North Sea
DML	Deemed Marine Licence
EIA	Environmental Impact Assessment
ESAS	European Seabirds At Sea
Ex.A	Examining Authority
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
JNCC	Joint Nature Conservation Committee
MMMP	Marine Mammal Mitigation Protocol
MMMZ	Marine Mammal Monitoring Zone
MMO	Marine Management Organisation
MU	Management Unit
PINS	Planning Inspectorate
pSAC	Possible Special Area of Conservation
SAC	Special Area of Conservation
SoCG	Statement of Common Ground
SNCB	Statutory Nature Conservation Body
WDC	Whale and Dolphin Conservation

1 INTRODUCTION

1.1 Reason for this Statement of Common Ground

1.1.1 This Statement of Common Ground (SoCG) has been prepared by SMart Wind Limited (SMart Wind) on behalf of Optimus Wind Limited and Breesea Limited (together 'the Applicant') and Whale and Dolphin Conservation (WDC) (together 'the Parties') as a means of clearly stating the areas of agreement, and any areas of disagreement, between the Parties in relation to the Development Consent Order (DCO) application for the Hornsea Offshore Wind Farm, Project Two ('the Project'). This SoCG does not deal with or extend to any development other than the Project.

1.2 Approach to SoCG

1.2.1 In accordance with discussions between the Applicant and WDC, this SoCG is focused on the key issues raised by WDC during the pre-application consultation and/or within the Relevant Representations from WDC which were made available to the Applicant on 27 April 2015.

1.2.2 Section 3 highlights those matters agreed between both Parties with respect to marine mammals and Section 4 highlights those matters where agreement has not yet been reached and which are the subject of on-going discussion.

1.2.3 Throughout this document the phrase "It is agreed..." is used as a precursor to any point of agreement that has been specifically stated by agreement between the Parties to this SoCG.

1.2.4 The phrase "It is not agreed..." is used as a precursor to any point that Parties to this SoCG wish to state as not yet agreed.

1.2.5 Statements relating to matters under discussion will be the subject of on-going discussion wherever possible to resolve, or refine, the extent of disagreement between the Parties.

1.2.6 Any reference made to the Project application material (such as the Environmental Statement and associated draft Deemed Marine Licence) is referring to the DCO application and its supporting documents submitted to the Planning Inspectorate on 30 January 2015.

1.2.7 It is the intention that this document will give the Examining Authority (Ex.A) sight of the level of common ground between the Parties at an early stage of the examination process. All matters agreed at this stage will remain agreed throughout examination.

1.3 The Development

- 1.3.1 The Project will consist of up to two offshore wind generating stations with a total capacity of up to 1,800 MW and will include all associated offshore and onshore infrastructure. There will be up to 360 turbines (depending on turbine type) within the Project, with turbine capacities ranging from 5 MW up to 15 MW being considered.
- 1.3.2 The area within the Hornsea Zone in which the Project's turbines and inter-array cabling, as well as associated infrastructure such as offshore HVAC collector substations, offshore HVDC converter stations and offshore accommodation platforms will be placed, has been labelled 'Subzone 2'. Subzone 2 is located in the centre of the Hornsea Zone and has a total area of 462 km². The western boundary of Subzone 2 lies 89 km from the coast of the East Riding of Yorkshire and the eastern boundary is 50 km from the median line between UK and Dutch waters.
- 1.3.3 The offshore cable route extends from the proposed landfall at Horseshoe Point in Lincolnshire, offshore in a north-easterly direction to the southern boundary of Subzone 2. The route is approximately 150 km in length. From the proposed landfall point at Horseshoe Point, onshore cables will connect the offshore wind generating stations to the onshore substation (which could comprise up to two electrical transmission stations) which will in turn, connect to the existing National Grid substation at North Killingholme in North Lincolnshire, a distance of approximately 40 km. For the purposes of this SoCG, 'offshore' refers to the land and seabed on the seaward side of the mean high water mark and 'onshore' refers to the land (and any seabed) on the landward side of the mean high water mark.
- 1.3.4 The Project comprises up to two offshore wind farms: Project A and Project B together with the associated development and grid connection for each Project. Both wind farms have the same connection point into the National Grid substation and follow the same cable route.
- 1.3.5 Project A and Project B are likely to be constructed by different operators: Optimus Wind Limited ('Optimus Wind') in the case of Project A and Breesea Limited ('Breesea') in the case of Project B. Both Optimus Wind and Breesea are named as an undertaker within the DCO. Optimus Wind is the relevant undertaker in relation to the Project A works, whilst Breesea is the relevant undertaker for the Project B works. The shared works can be carried out by Optimus Wind or Breesea. This is subject to the transfer provisions included within the DCO.
- 1.3.6 To facilitate this multi undertaker approach, the DCO provides for four deemed marine licences (DMLs), two for Project A (one for the generating station (DML A1) and one for the offshore transmission infrastructure (DML A2)) and two for Project B (again, one for the generating station (DML B1) and one for the offshore transmission infrastructure (DML B2)).

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- 1.3.7 The DCO confers on Optimus Wind powers of compulsory acquisition, subject to the consent of Breesea, over land required for the Project A works and the shared works or to facilitate, or which is incidental to those works and it confers on Breesea powers of compulsory acquisition, subject to the consent of Optimus Wind, over land required for the Project B works and the shared works or to facilitate, or which is incidental to those works.
- 1.3.8 The works are described in such a way as to allow flexibility as to whether they form one or two wind generating stations together with the required associated development. This approach means that the consent granted will be flexible and will allow a commercial decision to be made post-consent on how the Project will be built out.

1.4 Application Elements Under WDC Remit

- 1.4.1 Work Nos. 1A and 1B to 5A and 5B (offshore works) detailed in Part 1 of Schedule A of the draft DCO submitted to the Planning Inspectorate (PINS) on 30 January 2015 describe the elements of the Project which may affect the interests of WDC.

2 CONSULTATION

2.1 Summary

- 2.1.1 The consultation undertaken by the Applicant during the pre-application process is detailed in the Consultation Report (PINS document reference 2.1), which accompanied the DCO submission and which demonstrates how the Applicant has complied with its duties under Section 42, 47, 48 and 49 of the Planning Act 2008.
- 2.1.2 Consultation was previously undertaken prior to January 2013 in relation to Hornsea Offshore Wind Farm Project One; however, no response was received from WDC. The Project Two SoCG represents a composite record of points agreed and not agreed in a Project Two context only.

2.2 Pre-application Consultation

- 2.2.1 The Applicant (and their ecology consultants RPS Energy Consultants Limited) has engaged in formal consultation with WDC on the project during the pre-application process as outlined in Table 2.1 below.
- 2.2.2 It is agreed that Table 2.1 presents an accurate chronological overview of the principal consultations with WDC undertaken prior to submission of the application.

Table 2.1 Consultation undertaken with WDC pre-application.

Date	Activity
04/10/2012	Scoping report issued to PINS. No response was received from WDC.
31/01/2013	SMart Wind (Phase 1) Consultation. No response was received from WDC.
03/12/2014	SMart Wind Section 42 (Phase 2) Consultation. No response was received from WDC.

2.3 Post-application Consultation

- 2.3.1 It is agreed that Table 2.2 presents an accurate chronological overview of the principal consultations in relation to the application which were undertaken with WDC during the post-application process.

Table 2.2 Consultation undertaken with WDC post-application.

Date	Activity
27/04/2015	WDC Section 56 response (Relevant Representations) provided to the Applicant.
15/05/2015	Meeting between the Applicant and WDC to discuss the issues raised in the WDC Relevant Representation and to determine whether there was scope for agreement on common ground.
20/05/2015	First draft of the SoCG submitted to WDC.
28/05/2015	Comments received from WDC on the first draft of the SoCG.
11/06/2015	Second draft of the SoCG submitted to WDC.
02/07/2015	Comments received from WDC on the second draft of the SoCG.
08/07/2015	Third draft of SoCG submitted to WDC
06/08/2015	WDC submit comments on V3 of the SoCG
06/08/2015	Fourth version of SoCG submitted to WDC for agreement.

2.3.2 The subject areas WDC focused upon within their Section 56 response (Relevant Representation) for the Project are: the importance of the Hornsea Zone for harbour porpoise and minke whale and potential impacts of underwater noise from construction on these marine mammal species as well as their prey species. As such, these topics and those discussed in pre-application consultation form the basis of the detail presented in this SoCG.

3 ACCEPTED DATA / STATEMENTS – MARINE MAMMALS

3.1 Introduction

- 3.1.1 The following sections of this SoCG set out agreed statements pertaining to those aspects of the Project, Environmental Impact Assessment (EIA) and associated draft DCO and DMLs that are of interest to WDC with regards to marine mammals.
- 3.1.2 In Volume 2, Chapter 4: Marine Mammals of the Environmental Statement (PINS document reference 7.2.4) the Applicant has assessed the impacts on marine mammals associated with the construction, operation and decommissioning of the Project, both alone and cumulatively with other plans and projects. The assessment was based upon a characterisation of the abundance and distribution of cetaceans (whales, dolphins and porpoise) and pinnipeds (seals) in the immediate Project area and over a wider area of the southern North Sea.
- 3.1.3 It is agreed that, where the points of agreement set out in the following Sections refer to Sections of the Environmental Statement those statements apply equally to the equivalent data, descriptions or analyses set out in any relevant technical reports, survey reports or any other application documents. Unless otherwise indicated, all paragraph references in this Section are to Volume 2, Chapter 4 of the Environmental Statement.

3.2 Accepted Statements

Consultation

- 3.2.1 It is agreed that throughout the pre-application process, that the level of consultation and the provision of information has been sufficient in informing WDC of the development of the Project and the predicted impacts on marine mammals.

Baseline Environment

- 3.2.2 It is agreed that the data used to inform the marine mammal baseline characterisation and reference population estimates was based on the best available data including monthly site-specific survey data (visual and acoustic) and that any inadequacies or limitations of the data have been addressed by adopting a precautionary approach in the assessment. It is agreed that the marine mammal surveys provide full seasonal coverage of the Hornsea Zone.

- 3.2.3 WDC's position on the advice provided by the SNCBs with regards to the marine mammal survey methodology is noted following discussions at the meeting on 15 May 2015 (see Table 2.2). It is noted that WDC have concerns over the suitability of recording marine mammals from vessels using an adaptation of the standard Joint Nature Conservation Committee (JNCC) European Seabirds At Sea (ESAS) survey method (Webb and Durinck, 1992) and that WDC recommend that dedicated marine mammal observers should be present during all marine mammal surveys, and that an accepted methodology for marine mammals surveys are used to undertake these surveys. However, it is agreed that the survey extent, effort and methodologies were consulted on and agreed in advance through consultation with the SNCBs and that WDC's concern is a generic concern relating to advice from SNCBs to offshore energy developments in the southern North Sea and does not relate solely to this Project.
- 3.2.4 WDC have concerns relating to the extent of the site-specific surveys, as well as the potential Special Areas of Conservation (pSACs) for harbour porpoise that may be consulted on this summer (one of which is likely to be in or overlapping the Hornsea site). Notwithstanding these matters, which are the subject of ongoing discussion as detailed in Table 4.1, it is agreed that the importance of the Hornsea Zone for harbour porpoise and minke whale was acknowledged in the assessment based on the best available data at the time of submission.

Worst Case Scenario

- 3.2.5 It is agreed that the worst case scenario has been assessed for each of the impacts for the Project, as outlined in Table 4.17 of Volume 2, Chapter 4 of the Environmental Statement.
- 3.2.6 It is agreed that the Marine Mammal Chapter of the Environmental Statement has adequately assessed the full range of potential impacts to marine mammals over all phases of the Project including direct effects (i.e., piling noise, vessel noise, collision risk, increased suspended sediments, accidental pollution, operational turbine noise, electromagnetic field (EMF) emissions and decommissioning noise) and indirect effects (i.e., resulting from impacts to marine mammal prey species).
- 3.2.7 It is agreed that, by adopting the 'Rochdale Envelope' (maximum adverse scenario) approach, the worst case was presented for each possible impact (e.g., from the range of foundation types proposed etc.) and therefore the effects of any other scenario will be no greater than the worst case scenarios presented within the Marine Mammal Chapter.

Designed in Mitigation Measures Adopted as part of the Project with Respect to Marine Mammals

- 3.2.8 WDC's position on the current best practice guidelines (JNCC, 2010) as discussed at the meeting on 15 May 2015 (see Table 2.2) is noted by the Applicant, notably that WDC consider there is little empirical data to support the effectiveness of soft-start procedures and that the 500 m mitigation zone may be inadequate to mitigate for injury effects. However, it is agreed that this concern is a generic concern relating to advice from SNCBs to offshore energy developments in the southern North Sea and does not relate solely to this Project.
- 3.2.9 It is agreed that the Marine Mammal Mitigation Protocol (MMMP) (secured by Condition 10 (2)(e) of the draft DMLs) to be approved by the MMO prior to commencement of the licensed activities is consistent with current best practice guidelines for mitigation to reduce injurious effects or permanent auditory injury (JNCC, 2010).

Methodology

- 3.2.10 It is agreed that the approach adopted in the Marine Mammal Chapter of the Environmental Statement was appropriate to assess the magnitude and range of impacts from the proposed project on marine mammals.
- 3.2.11 It is agreed that the matrix approach to the assessment that has been adopted in Table 4.20 of Volume 2, Chapter 4 ensures that all subjective determinations of impact significance are repeatable and are understood.
- 3.2.12 It is agreed that the key marine mammal species (i.e., Valued Ecological Receptors) that were considered in the impact assessment are appropriate. It is agreed that the importance of the area for key species (notably harbour porpoise and minke whale) has been taken into account when assessing the sensitivity of these species to potential effects, including underwater noise, arising from the construction, operation and decommissioning of the Project.
- 3.2.13 It is agreed that, in acknowledgment of the range of potential impacts that underwater noise may have on marine mammals, the underwater noise assessment was informed by site-specific noise modelling as summarised in paragraphs 4.6.25 to 4.6.43 of Volume 2, Chapter 4.
- 3.2.14 It is agreed that the Applicant has adopted a precautionary approach to the assessment of potential impacts of underwater noise on marine mammals as detailed in paragraphs 4.6.37 of Volume 2, Chapter 4.
- 3.2.15 It is agreed that the Applicant has adopted a precautionary approach throughout the impact assessment with regards to predicting impacts of subsea noise on marine mammals, including but not limited to:
- Two worst case scenario were assessed (the worst case spatial and the worst case temporal) in order to assess the maximum effects from each;

- Presentation of the data that gives rise to the highest spatial density estimates and greatest number of animals affected (i.e., acoustic data density estimates, as well as visual data density estimates);
- The level of impact calculated for each species was based upon 100% of animals exposed up to each noise threshold being affected to the maximum extent (i.e., 100% of individuals exposed to the auditory injury threshold will develop auditory injury and so on); and
- For the threshold of behavioural avoidance, it was assumed that all animals within this zone would be displaced, which is the upper limit of behavioural response for this threshold.

3.2.16 It is agreed that the thresholds applied for the different zones of impact (injury, temporary hearing loss, possible avoidance and likely avoidance; see Table 4.24 of Volume 2, Chapter 4 of the Environmental Statement) were conservative and based on published values agreed in advance with the SNCBs.

3.2.17 It is agreed that adopting a highly precautionary approach provides confidence that the effects that do occur will most likely be less than the maximum adverse effects predicted for harbour porpoise and minke whale during construction.

3.2.18 It is agreed that the Applicant has shown a commitment to add to the understanding of the effects of underwater noise on marine mammals through participating in, and jointly funding, the ongoing work within the DEPONS programme (as summarised in paragraphs 4.6.56 to 4.6.63 of Volume 2, Chapter 4).

3.2.19 It is agreed that cetaceans are afforded strict protection under the Habitats Directive and as such a European Protected Species (EPS) licence will be required for the Project where piling is proposed.

Impact Assessment

3.2.20 Based on the precautionary approach taken, as described in paragraphs 3.2.116 and 3.2.15, it is agreed that the impact assessment provided a conservative approach and the quantification of effects is therefore likely to be less than those described in Volume 2, Chapter 4 of the Environmental Statement. It is agreed the assessment of significance was based on the worst case effects.

Additional Mitigation Measures

3.2.21 It is agreed that the Applicant will continue to monitor the emerging technologies in the field of engineering solutions for noise mitigation and will give final consideration to this prior to construction. The details of any additional noise mitigation, as appropriate, will be included within the Marine Mammal Mitigation Protocol (MMMP) which will be agreed with the Marine Management Organisation (MMO).

Cumulative Impact Assessment

- 3.2.22 It is agreed that the Applicant has used the best available evidence to assess the cumulative impacts of the Project with other plans and projects on marine mammals, noting however, the exception of the harbour porpoise cumulative impact assessment study area which is subject to on-going discussion (see Table 4.1).

Habitats Regulation Assessment

- 3.2.23 It is agreed that the Habitats Regulation Assessment (HRA) has adequately assessed the impact to marine mammals from underwater noise.
- 3.2.24 It is agreed that a process is currently underway to identify a number of pSACs for harbour porpoise in the UK under the EU Habitats Directive, including one in the Southern North Sea. It is agreed that at present the boundaries, conservation objectives and management measures of these sites have not been finalised or made public. The Applicant is committed to maintaining a watching brief and acknowledges that consideration of the implications of the designation of pSACs may be required.

Deemed Marine Licences

- 3.2.25 As detailed in paragraph 3.2.8, WDC's position on the current best practice guidelines (JNCC, 2010) as discussed at the meeting on 15 May 2015 (see Table 2.2) is noted by the Applicant. WDC consider there is little empirical data to support the effectiveness of soft-start procedures, that the 500 m mitigation zone may be inadequate to mitigate for injury effects and that the use of ADDs has not been proven as a mitigation for pile driving and cannot be relied upon for the range of species likely to be encountered. However, it is agreed between the Parties that this concern is a generic concern relating to advice from SNCBs to offshore energy developments in the southern North Sea and does not relate solely to this Project.
- 3.2.26 It is agreed that the MMMP, secured pursuant to Condition 10(2)(e) of Schedules H, I, J and K of the draft DCO, will follow current best practice as advised by the SNCBs at the time of discharging. The MMMP and may include, but is not limited to, identification of a Marine Mammal Monitoring Zone (MMMZ), appointment of marine mammal observers, methods for the detection of marine mammals within the MMMZ, a reporting methodology between the marine mammal observers, an appropriate soft start procedure, the application of acoustic deterrent devices and where appropriate consideration of the use of noise reduction at source technologies.



3.2.27 It is agreed that noise generated by the installation of the first four foundations of each discrete foundation type will be measured, secured pursuant to Condition 16 (2)(a) of Schedules H, I, J and K of the draft DCO. It is agreed that the initial noise measurements monitored in accordance with Condition 16(2)(a) will be provided to the MMO within six weeks of the installation of the first four foundations of each discrete foundation type, secured pursuant to Condition 16 (4) of Schedules H, I, J and K of the draft DCO. The assessment of this report by the MMO shall determine whether any further noise monitoring is required.

4 MATTERS SUBJECT TO ONGOING DISCUSSION – MARINE MAMMALS

- 4.1.1 Table 4.1 identifies those matters raised by WDC in Section 56 responses (Relevant Representations), which have yet to be resolved and are subject to ongoing discussion and/or work.

Table 4.1 Matters subject to ongoing discussion – marine mammals.

WDC position	The Applicant's position
<p>Cumulative Impact Assessment</p> <p>The purpose of the CIA is to try and assess the effects of the development on the North Sea population of harbour porpoise in particular, therefore all other projects that have the potential to impact that population need to be considered. However the applicant has not screened all projects within the range of the North Sea harbour porpoise, including, but not limited to, the Scottish offshore wind farms which fall into this category. These projects need to be included to give an accurate CIA.</p> <p>WDC believe that even without these projects included, further mitigation measures are required to reduce the predicted behavioural impacts on harbour porpoise and minke whale that is predicted in the CIA.</p>	<p>The CIA regional study area was defined in order to focus the assessment on those projects that were most likely to result in a significant effect when considered cumulatively with the Project. Although the North Sea is one Management Unit, there is evidence from the literature to show that porpoise move in response to the presence of prey species and that their movements are more likely to be restricted where resource availability is high. Based on assumption that density is a proxy for resource availability (as assumed in DEPONS programme; van Beest <i>et al.</i>, 2015), the Hornsea Zone is likely to be a food rich area. Foraging strategy models predict movements of 60 – 80 km from a starting point in areas of high resource availability and where food replenishes rapidly (Nabe-Nielsen <i>et al.</i>, 2013). Sites in Scotland are greater than 300 km from the Hornsea Zone and therefore, whilst still within the North Sea MU, these developments lie outside the area that we considered would have strong connectivity with the Hornsea Zone and therefore it is less likely for a project here to result in cumulative effects with the Project. Inclusion of these sites would not change the conclusion of the impact assessment of the project. The Regional study area encompasses the whole of the south central North Sea, and was also extended further south and east to include other Round 3 offshore wind farms in the vicinity. The Regional Marine Mammal Study Area covers an area of ~197,200 square kilometres.</p> <p>The Applicant does not believe that mitigation is necessary for behavioural effects as no long-</p>

WDC position	The Applicant's position
	<p>term effects on marine mammal populations are predicted. The Applicant's position is that the appropriateness of mitigation will be considered prior to construction, in line with best practice, and in agreement with regulators and SNCBs. This is a developing industry and therefore it would not be appropriate to make commitments at this stage. Mitigation will be provided for injurious effects on marine mammals and will be agreed with statutory consultees and undertaken, as far as possible, in line with best practice guidelines.</p>
<p>Study Area</p> <p>WDC note that the marine mammal study area extends to 10 km buffer from the Hornsea Zone, however studies have shown that the noise generated by pile driving causes behavioural changes in harbour porpoises up to 15 km from the source, and mask communication up to 40 km. A 15 km buffer minimum would have preferred for this application, especially due to the sensitive nature of the site for harbour porpoises, therefore WDC do not agree that the study area for site surveys was sufficient to obtain adequate data on cetaceans that may be impacted by the development.</p>	<p>The scope and extent of the site-specific marine mammals surveys were agreed upfront with the SNCBs. The Applicant notes WDC's recommendation that a minimum 15km buffer zone would have been preferred around the site-specific survey zones to cover the extent over which behavioural effects could potentially occur. However, the issue of survey coverage was addressed through consultations with the SNCBs and a suitable, and conservative, approach was agreed using extrapolation of the site-specific marine mammal data to cover the zone of potential effect from piling predicted from the site-specific noise modelling (see Table 4.4 (row 7) of Volume 2, Chapter 4 of the ES).</p>
<p>pSAC</p> <p>The likely harbour porpoise SACs, including one overlapping the development area, raises WDC's concerns that the importance of the Hornsea Zone, in the ES, for harbour porpoise is not adequately addressed.</p> <p>The plans for Hornsea 2 are highly likely to interfere with conservation objectives, especially for harbour porpoise, therefore the current assessment of effects on harbour porpoise will need to be reviewed.</p> <p>WDC note that the potential SACs have been put forward after the Applicant's ES was submitted, however WDC believe that further commitment to the use of alternative foundations must be given in order to retain the site integrity of the SAC.</p>	<p>As outlined in paragraph 3.2.24, it is agreed between the Parties that at present the boundaries, conservation objectives and management measures of these sites have not been finalised or made public. Therefore, the Applicant's position remains that, as the boundaries, conservation objectives and management measures of these sites have not been finalised or made public, no further information can be provided by the Applicant at this stage. The Applicant is committed to maintaining a watching brief and acknowledges that consideration of the implications of the designation of pSACs may be required.</p> <p>As discussed between the Parties at the meeting on 15 May 2015, the Applicant considers that the importance of the Hornsea Zone (and Dogger Bank) for harbour porpoise have been fully acknowledged within the</p>

WDC position	The Applicant's position
	<p>Volume 2, Chapter 4: Marine Mammals of the ES (paragraph 4.5.43) where it is noted that <i>'within the south central North Sea, the Hornsea and Dogger Zones may represent key areas for harbour porpoise, possibly due to environmental and ecological conditions that favour these as important foraging areas'</i>.</p> <p>Harbour porpoise were valued as internationally important within the Project Two marine mammal study area, therefore, the Applicant considers that the importance of the area for these species has therefore been taking into account when assessing the sensitivity of harbour porpoise to the potential effects arising from the construction, operation and decommissioning of the Project.</p>

5 MATTERS DISAGREED

- 5.1.1 Table 4.12 identifies those matters raised by WDC in Section 56 responses (Relevant Representations), which have yet to be resolved and are subject to ongoing discussion and/or work.

Table 5.2 Matters disagreed – marine mammals.

WDC position	The Applicant's position
<p>Noise from piling</p> <p>WDC has strong concerns regarding the impact of underwater noise from construction on marine mammals, in particular the disturbance to harbour porpoise, but also to minke whale. The importance of the area for harbour porpoise has been acknowledged by the Applicant and has been identified as important for harbour porpoise and minke whale, and is in an area proposed as a harbour porpoise SAC. The noise from pile driving has been proven to displace, disturb, and potentially injure harbour porpoise at distances up to 15 km. There are a number of alternative foundations that do not require piling, and WDC strongly suggest that these are considered instead of foundations requiring piling. WDC objects to the inclusion of impact pile driving of monopiles with no guarantee of further mitigation. We are concerned that the MMMP requirements do not adequately provide this mitigation, as it only requires the 'best practice' mitigation methods to be employed. It also only relates to injury/PTS, so this does not mean that these will necessarily be at an adequate level to reduce the impact of disturbance on harbour porpoise.</p>	<p>Monopile foundations are a proven technology available to the offshore wind industry and consequently have been used for many of the offshore wind farms constructed to date and currently being constructed in the UK. This foundation technology, together with others, such as gravity bases and jackets with pin pile foundations (i.e. also requiring piling) were considered within the Project Environmental Statement (Volume 1, Chapter 3: Project Description; PINS document reference 7.1.3).</p> <p>As agreed in Section 3.2 above, potential disturbance has been addressed by adopting a highly precautionary approach throughout the assessment and by assessing two worst case scenarios (temporal and spatial) for each species so that the Applicant can be confident that effects that do occur will most likely be less than the maximum adverse effects predicted for harbour porpoise and minke whale during construction.</p> <p>The Applicant continues to monitor the emerging technologies in the field of engineering solutions for noise mitigation and will give final consideration to these prior to construction. The details of mitigation, as appropriate, will be included within the MMMP to be agreed with the MMO prior to commencement of the licensed activities.</p>
<p>Consultation on MMMP</p> <p>WDC request to be engaged in the development of the MMMP, recognising that we are not statutory consultees. This approach was taken for the Dogger Bank Creyke Beck and Dogger Bank Teesside</p>	<p>The Applicant maintains the position that Natural England, as statutory consultee, will be consulted with regards to the Marine Mammal Mitigation Protocol (MMMP). Natural England, where appropriate, may choose to consult with WDC on the MMMP and therefore WDC have</p>

WDC position	The Applicant's position
A&B application and was accepted by the Applicant and the MMO.	not been included within the wording of the DML for Project Two.

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