

Hornsea Offshore Wind Farm

Project Two

Statement of Common Ground between the Applicant and the RSPB

Appendix Z to the Response submitted for Deadline III

Application Reference: EN010053

24 September 2015

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Hornsea Offshore Wind Farm

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Statement of Common Ground between The Royal Society for Protection of Birds and SMart Wind Ltd. in relation to Offshore Ornithology

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STATEMENT OF COMMON GROUND BETWEEN THE RSPB AND SMART WIND LTD. IN RELATION TO OFFSHORE ORNITHOLOGY

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 The Royal Society for the Protection of Birds (the RSPB) (together 'the parties') as a means of clearly stating the areas of agreement, and any areas of disagreement, between the two parties in relation to the proposed Development Consent Order (DCO) application for the Hornsea Offshore Wind Farm, Project Two ('the Project').

1.2 Approach to SoCG

- 1.2.1 This SoCG details the matters agreed between the Applicant and the RSPB with regard to offshore Ornithology only followed by a summary of the matters currently under discussion and matters not agreed. A SoCG addressing all matters in relation to intertidal ornithology has been prepared separately.
- 1.2.2 This SoCG has been prepared for submission at Deadline III in order to provide the Examining Authority (Ex.A) with a clear understanding of the progress made on addressing those matters raised by the RSPB within their representations submitted in relation to the examination of the Project.

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)).
- 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 Stakeholder remit

- 1.4.1 The RSPB is the largest wildlife conservation organisation in Europe and the stated focus of its work is on the conservation of threatened species and habitats and it operates at national, regional and local levels.
- 1.4.2 The RSPB's work includes protecting, restoring and managing habitats for birds and other wildlife, researching the problems facing them and the environment, and working with decision makers on their behalf.
- 1.4.3 Although the RSPB is not prescribed as a statutory consultee as part of the Planning Inspectorate's Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, SMart Wind recognised the potential interest of this type of project to the RSPB for which the RSPB is very grateful. As such, SMW has sought to consult with the RSPB throughout pre-application and post-application consultation.

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 has also been undertaken with the RSPB prior to January 2013 in relation to Project One.

2.2 Pre-application Consultation

- 2.2.1 The Applicant has engaged with the RSPB on the Project during the pre-application process, both in terms of informal non-statutory engagement and formal consultation.
- 2.2.2 It is agreed that Table 2.1 presents an accurate chronological overview of the principal consultations with the RSPB undertaken prior to submission of the application.

Table 2.1 Consultation undertaken with the RSPB pre-application.

Date	Activity
27/06/2012	Update on Hornsea Project 1 and 2 and progress of surveys
06/11/2013	Update on Hornsea Project 2 and proposed consultation timelines
19/11/2014	Update on Hornsea Project 2 and assessment approaches

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 the RSPB post-submission of the application.

Table 2.2 Consultation undertaken with the RSPB post-application.

Date	Activity
28/05/2015	Pre-examination meeting with the RSPB to discuss outstanding concerns
21/08/2015 & 10/09/2015	Drafts of the SoCG exchanged between SMW and the RSPB
15/09/2015	Discussion on the RSPB's outstanding concerns and any areas of agreement in advance of the Issue Specific Hearing.
21/09/2015	Further Draft SoCG shared with the RSPB
23/09/2015	Draft SoCG returned to SMW following the RSPB's review

3 SUMMARY OF MATTERS UNDER DISCUSSION

3.1 Issues raised by the RSPB

- 3.1.1 Within the RSPB's relevant and written representation, answers to Examining Authority Questions and its Deadline II response it has have raised a number of concerns. The RSPB state its primary offshore ornithology concern is the location of the windfarm in relation to the Flamborough and Filey Coast pSPA (formerly the Flamborough and Bempton Cliffs SPA).
- 3.1.2 The RSPB has also stated it is concerned about the robustness of the assessment due to the following issues, and due to these deficiencies it cannot rule out adverse effects on the pSPA and its designation species: These concerns can be broadly summarised as follows:
- Collision Risk Modelling (the assessment to gannet, kittiwake, lesser black-backed gulls, including the use of the extended band model and the avoidance rates adopted);
 - Disturbance and displacement (for guillemot, razorbill and puffin including the extent of buffer zones adopted); and
 - PBR (the continued use of PBR as a means of assessing the overall impact of the project and the associated reliance on PBR analysis).

3.2 Matters agreed

- 3.2.1 It is agreed that the RSPB have been adequately consulted by SMW throughout all stages of the Project's pre-application and post-application consultation.
- 3.2.2 It is agreed that the RSPB has limited its consideration of offshore environmental impacts to bird populations of the following designated sites and effects on these sites have been assessed within the Habitat Regulations Assessment:
- Flamborough Head and Bempton Cliffs SPA; and
 - Flamborough Head and Filey Coast pSPA

The methods used for obtaining bird densities for input into collision risk modelling and displacement analysis from boat based surveys

- 3.2.3 It is agreed that the methods used to obtain the densities of birds within the Project area and associated buffers for use with the collision risk modelling and displacement analysis are appropriate to inform the assessment.

The expression of uncertainty or variability in the expression of collision risk

- 3.2.4 It is agreed that Appendix J of the Applicant's response to Deadline I has in part addressed the RSPB's concerns regarding the handling of uncertainty in CRM and the results presented in Appendix J account for the uncertainty arising from variability in flight height and density in the data.

The updated Population Viability Analysis (PVA)

- 3.2.5 It is agreed that the Population Viability Analysis (PVA) provided by the Applicant in Appendix M of the Applicant's response to Deadline IIa has addressed all the issues raised by the RSPB in their relevant and written representations and is appropriate for determining the potential effect of the Project on features of the Flamborough and Filey Coast pSPA and the Flamborough and Bempton Cliffs SPA. .

The apportioning of gannet, kittiwake, guillemot, razorbill and puffin to the Flamborough and Filey Coast pSPA within the HRA report

- 3.2.6 Notwithstanding the disagreement between the Applicant and the RSPB on the breeding season apportioning methodologies presented in Appendices N-Q (as detailed in Table 3.4 below) it is agreed that the Applicant has provided all the relevant information on apportioning in order for the RSPB to draw their conclusions on the potential effects of the Project on the features of the Flamborough and Filey Coast pSPA and the Flamborough and Bempton Cliffs SPA.

The selected displacement and mortality rates used within the displacement assessment in the HRA report

- 3.2.7 Notwithstanding the disagreement on appropriate displacement and mortality rates used within the Applicant's displacement assessment as detailed in **Error! Reference source not found.** below, it is agreed that the Applicant has provided all the relevant information to enable the RSPB to draw their conclusions on the potential displacement effects of the Project alone and in-combination.

Use of buffer areas within the displacement assessment

3.2.8 The RSPB acknowledge the SNCB advice on the use a 2km buffer for the assessment of displacement effects, and although the RSPB would prefer a range of buffer sizes to be presented, up to and including 4km (to reflect the larger potential displacement distances recorded in Belgian and Danish studies of 3 and 4km respectively), it is agreed the application of a 2km buffer is suitable for the purposes of the displacement assessment.

3.3 Matters under discussion

3.3.1 The following matters are still under discussion with the RSPB:

- The partial reliance on PBR within the assessment; and
- Cumulative and in-combination assessment.

3.4 Matters not agreed

3.4.1 Matters relating to the use of site specific flight height data and the extended Band model (for kittiwake and gannet) are not agreed. These two areas of debate have been discussed in detail between the industry and the statutory nature conservation bodies over the last 18 months, including during the previous examination for Hornsea Project One. There has not been a change in position from either side in relation to these topics since these debates were last had. Similarly neither party is aware of any work that has been or could realistically be undertaken within the timeframes of this Project's examination to change these positions.

3.4.2 Despite the disagreement on the matters detailed in Tables 3.1 and 3.2, the Applicant has presented a range of collision risk outputs using all versions of the Band (2012) model at a range of avoidance rates. The RSPB welcomes this presentation.

Table 3.1: Matters not agreed - use of site specific flight height data

Applicant's position	The RSPB's position
The Applicant believes the flight height data collected specifically for Hornsea Project Two is appropriate for use within both the basic and extended Band (2012) Model. The Applicant	The RSPB do not believe that the site specific data are sufficiently accurate or were collected at a sufficiently high resolution to be used for the more sophisticated Extended Band Model.

Applicant's position	The RSPB's position
<p>believes there is sufficient survey data to inform the understanding of the flight height distributions of key species at risk of collision. The Applicant considers that the combination of the Extended version of the model with site-specific flight height data (i.e. Option 4 of Band 2012) produces as accurate a prediction of the risk to seabirds as is possible with current information and risk assessment tools. In contrast, the Basic version of the Model only approximates collision rates, in a highly precautionary way, because, amongst other things, it fails to fully take account of the way that birds are distributed over the sea surface.</p>	<p>Moreover, due to unresolved issues with the numbers of kittiwake recorded at Potential Collision Height, the RSPB favour the use of Option 2 of the Basic Band Model.</p>

Table 3.2: Matters not agreed - use of avoidance rates in the extended Band model

Applicant's position	The RSPB's position
<p>The Applicant favours the use of Option 4 (the Extended Model) in using the combination of the most sophisticated model and site specific flight height data. The Applicant has implemented a precautionary 98% avoidance rate for gannet and kittiwake for Options 3 and 4 (Extended Model) in the absence of recommendations from Cook <i>et al.</i> (2014). Although Cook <i>et al.</i> (2014) did not feel able to recommend a specific avoidance rate for kittiwake and gannet for the Extended Model,</p>	<p>For the reasons given in Table 3.1 the RSPB do not think the use of Option 4 of the extended Band model is acceptable in this instance. The 98% avoidance rate advocated by the Applicant cannot be considered precautionary as there is no evidence to support this figure. The most recent, thorough and wide ranging review of Avoidance Rates, (Cook <i>et al.</i>, 2014), based on the current evidence, was unable to derive an avoidance rate for the extended model for gannet and kittiwake, and therefore recommended</p>

<p>the review by SMart Wind & Forewind (2013) (submitted as Appendix Z of the Applicant's response to Deadline 1) also considers what precautionary avoidance rates should be used in the Extended version of the Model This paper concludes on the basis of a comparison of the rates predicted by the Basic version of the Model and the directly observed levels of avoidance at coastal and offshore wind farms that an avoidance rate of 98% is sufficiently precautionary.</p>	<p>that the Extended Model only be used for these species to calculate no-avoidance collision rate. This review supersedes all other previous reviews. Therefore the RSPB recommends that only the Basic Model is used for this assessment</p>
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Table 3.3: Matters not agreed – adding of seasonal displacement values

Applicant's position	The RSPB's position
<p>The Applicant considers it is not appropriate to add seasonal or monthly mortality estimates together to generate an estimate of 'annual' mortality as the impacts in different seasons or months are on different biological populations. Any summation of mortality rates has to take account of the duration of any defined period and the ultimate annual result is highly dependent on the number of periods defined rather than any insight from species population dynamics</p>	<p>The RSPB welcomes separate seasonal displacement matrices, but in order to aid assessment these must also be presented in a way appropriate to further analysis by Population Viability Analysis, (PVA) such as summing to produce an overall annual mortality. Where there may also be collision impacts, these should be combined to assess total combined mortality</p>

Table 3.4 Matters not agreed – apportioning of birds to the Flamborough and Filey Coast pSPA during the breeding season.

Species	Applicant's position	The RSPB's position
Kittiwake	38%	94.6%
Guillemot	12.1%	46.3%



Razorbill	37%	48.2%
Seabird assemblage: Puffin	5.8%	38%