



The Wildlife Trusts

*The Kiln
Waterside
Mather Road
Newark
Nottinghamshire
NG24 1WT
Tel (01636) 677711
Fax (01636) 670001
Email
info@wildlifetrusts.org*

*Website
www.wildlifetrusts.org*

Frances Fernandes
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

The Wildlife Trust reference: 20022896.

BY EMAIL

6 December 2019

Dear Frances

Written Representation by The Wildlife Trusts for Norfolk Vanguard Offshore Wind Farm

The Wildlife Trusts (TWT) welcome this opportunity to comment further on the Norfolk Boreas Offshore Wind Farm application. Alongside this Written Representation, we have developed a Statement of Common Ground with the Applicant.

TWT, with more than 800,000 members are the largest UK voluntary organisation dedicated to conserving the full range of the UK's habitats and species, whether they be in the countryside, in cities or at sea. TWT manages 2,300 reserves covering more than 90,000 hectares of land including coastal reserves; TWT stand up for wildlife, inspire people about the natural world and foster sustainable living.

TWT support the UK's current targets to reduce greenhouse gas emissions and the government's ambitions to tackle climate change and increase the proportion of overall energy generated from alternative sources. However, we do not believe that this should be at the expense of the environment and firmly believe that it needs to be 'right technology, right place'.

TWT has engaged with the applicant throughout the evidence plan process with representation on the Marine Mammals Expert Topic Group.

As a summary, our concerns regarding Norfolk Vanguard Offshore Wind Farm are as follows:

- 1) **Management of impacts on the Southern North Sea SAC:**
 - a) We highlight that a mechanism to regulate underwater noise management within the Southern North Sea SAC is lacking, and therefore, TWT cannot conclude that there will be no adverse effect on the Site.
 - b) We are pleased that the applicant has committed to develop an in-principle Site Integrity Plan to ensure that mitigation will be delivered to ensure no adverse effect. However, this document currently lacks detail on the effectiveness of proposed mitigation.

*Patron
HRH The Prince of Wales
KG KT GCB OM*

*Royal Society of Wildlife Trusts
Registered Charity no. 207238
Printed on environmentally
friendly paper*

- 2) **Inclusion of UXO clearance and mitigation within the Development Consent Order (DCO):** It is acknowledged within the assessment that UXO clearance can cause injury (alone) and disturbance (in-combination) which could lead to an adverse effect on the Southern North Sea SAC and Favourable Conservation Status (FCS) of European Protect Species. TWT hold the position that to ensure site integrity/FCS, UXO clearance should be secured within the draft DCO alongside mitigation required. A precedent has been set in the recent East Anglia One North and East Anglia Two offshore wind farm applications, which includes UXO clearance in the draft DCO alongside associated mitigation. This approach should be followed by the Applicant.
- 3) **Marine mammal and underwater noise monitoring:** TWT continues to hold concerns regarding the level of underwater noise and marine mammal monitoring proposed for this application. TWT advocates a strategic approach to marine mammal and underwater noise monitoring and is pleased that the applicant is supportive of this approach. However, a mechanism to deliver this is lacking. TWT advocates the introduction of a conditioned underwater noise Fund and more detail is provided in Appendix B.
- 4) **Inclusion of fishing in in-combination assessments:** Fishing has not been included in any in-combination assessments within the application. Fishing is a licenced activity that can have an impact on the marine environment. To meet Article 6(3) of the Habitats Directive, fishing must be included in the in-combination assessments. Defra policy¹ requires existing and potential fishing operations to be managed in line with Article 6 of the Habitats Directive.
- 5) **Post-consent engagement with the applicant:** TWT is in ongoing discussions with the Applicant on post-consent engagement. TWT has built a good relationship with the Applicant during the evidence plan process and we wish for this to continue post-consent. However, based on the current level of proposed engagement by the applicant, we are concerned that post-consent engagement with TWT will not be adequate. We are working with the applicant towards a Memorandum of Understanding to clarify and further the working relationship, particularly on the post-consent and pre-construction phase of the Project.

We have included detailed comments on the above points in appendix A.

Thank you for taking our comments into consideration. We are happy to provide more details if required.

Yours sincerely



Joan Edwards
Director, Public Affairs and Living Seas
The Wildlife Trusts

¹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/345970/REVISED_APPROACH_Policy_and_Delivery.pdf

Appendix A

1. Impacts on the Southern North Sea SCI

1.1. There are a number of outstanding issues which means that TWT cannot conclude for the Norfolk Boreas application that there will be no adverse effect beyond reasonable scientific doubt on the Southern North Sea SAC.

1.2. Site Integrity Plan (SIP)

1.2.1. Firstly, the SIP lacks detail and therefore in its current form it is not adequate. More detail should be provided on the effectiveness of the proposed mitigation as outlined in the SIP. This should include referenced examples of how the implementation of mitigation will reduce underwater noise disturbance impacts within the Southern North Sea SAC. Noise modelling should also be undertaken to demonstrate the degree of noise reduction which could be achieved through mitigation.

1.3. Lack of regulatory mechanism to manage underwater noise

1.3.1. We cannot conclude no adverse effect on the Southern North Sea SAC due to the lack of regulatory mechanism to manage in-combination underwater noise impacts. Defra and the Southern North Sea Regulators Working Group are taking positive steps to develop effective management for in-combination underwater noise impacts and TWT will continue to work closely with all stakeholders on this. However, as management mechanisms are currently not in place, we suggest the Planning Inspectorate and the Secretary of State considers what controls need to be put in place to ensure no adverse effect on the Southern North Sea SAC at this current time.

2. UXO clearance

2.1. TWT holds the position that to ensure site integrity for the Southern North Sea SAC and Favourable Conservation Status (FCS) of European Protected Species (EPS), UXO clearance should be secured within the draft DCO alongside any mitigation required. East Anglia One North and East Anglia Two have secured a mitigation for UXO clearance within the draft DCO². This has now set a precedent and best practice must be followed.

2.2. The impact assessment for Norfolk Boreas has shown a major adverse effect for PTS in harbour porpoise from UXO clearance (ES, Table 12.24). This assessment is supported by peer-reviewed evidence³. In addition, table 8.11 in the Information to Support the Habitats Regulations Assessment shows that PTS impacts could be up to 14.4km and currently there is little evidence to support the effectiveness of mitigation at this distance. Therefore, the developer will need to provide proven mitigation during the implementation of this activity to ensure no adverse effects from injury impacts.

2.3. As no draft MMMP for UXO clearance has been produced as part of the dDCO, we cannot agree with certainty that there would be no adverse effect from PTS impacts from this activity.

2.4. In addition, without mitigation, there is potential for adverse effects from in-combination noise disturbance impacts on the Southern North Sea SAC. Mitigation for in-combination impacts will be secured through the Site Integrity Plan (SIP). The SIP makes reference to UXO clearance, yet

² East Anglia One North draft DCO <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010077/EN010077-000975-3.1%20EA1N%20Draft%20Development%20Consent%20Order.pdf>
e.g. schedule 13 Condition 16

³ Benda-Beckman, A.M., Aarts, G., Ozkan Sertlek, H., Lucke, K., Verboom, W.C., Kastelein, R.A., Ketten, D.R., Van Bemmelen, R., Lam, F-P.A., Kirkwood, R.J., Ainslie, M.A. (2015). Assessing the Impact of Underwater Clearance of Unexploded Ordnance on Harbour Porpoises (*Phocoena phocoena*) in the Southern North Sea. *Aquatic Mammals*. 41(4), 503-523.

the SIP deemed Marine Licence condition within the draft DCO only makes reference to piling. To secure mitigation for in-combination disturbance effects to ensure no adverse effect on the site, mitigation in relation to UXO clearance must be referenced in the DCO.

2.5. The following text of the European Commission Article 6 Habitats Directive Guidance from 21st November 2018⁴ (page 52) establishes the obligation to detail the effectiveness of mitigation measures.

*“For the competent authority to be able to decide if the mitigation measures are sufficient to remove any potential adverse effects of the plan or project on the site (and do not inadvertently cause other adverse effects on the species and habitat types in question), **each mitigation measure must be described in detail**, with an explanation based on scientific evidence of how it will eliminate or reduce the adverse impacts which have been identified. Information should also be provided of how, when and by whom they will be implemented, and what arrangements will be put in place to monitor their effectiveness and take corrective measures if necessary. **The need for definitive data at the time of authorization is also raised in case C-142/16, paragraphs 37-45.**”*

3. Marine mammal and underwater noise monitoring

3.1. TWT continues to hold concerns regarding the level of underwater noise and marine mammal monitoring proposed for this application.

“Monitoring would include measurements of noise generated by the installation of the first four piled foundations of each piled foundation type to be installed in order to validate the assumptions made within the ES. (...) The results of the initial noise measurements must be provided to the MMO within four weeks of the installation of the first four piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required.”

This approach will not provide any information on the noise levels per day or during the lifetime of the construction programme, which is essential for understanding the impacts of underwater noise on harbour porpoise as an EPS and the Southern North Sea SAC. European Commission Article 6 Habitats Directive (page 52) establishes the obligation to monitor the effectiveness of mitigation measures.

Based on this, the current approach of the competent authority is not sufficient to monitor the effectiveness of the mitigation measures as the noise monitoring considers only the first four piles (of each type) and no harbour porpoise monitoring is included. Pre, during and post construction monitoring is required of both noise levels and harbour porpoise activity to understand the impact of underwater noise on harbour porpoise as an EPS and on the Southern North Sea SAC.

3.2. As the current draft MMMP relates to piling only, we are not yet able to comment on marine mammal and noise monitoring approaches for UXO clearance. We highlight that there are gaps in evidence to support the effectiveness of mitigation and advocate that this must be factored into the monitoring plan.

3.3. TWT advocates a strategic approach to marine mammal monitoring. We are pleased that the applicant is supportive of this approach. Developers all agree that a strategic approach to monitoring

⁴ Commission notice "Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/Provisions_Art_.nov_2018_endocx.pdf

is the most effective approach but consistently highlight that a mechanism for delivery is lacking.

- 3.4. TWT advocates the introduction of a conditioned underwater noise fund, whereby all offshore wind farm developments should contribute funding and participate in the delivery of strategic monitoring. For further details please see Appendix B
- 3.5. We are pleased that we will be consulted on the post-consent development of monitoring requirements.

4. Inclusion of fishing in in-combination assessments

4.1. As a principle, fishing must be included in all in-combination assessments to meet Article 6(3) of the Habitats Directive. It must be noted that these comments are not specific to the Southern North Sea SAC. Fishing is a licensable activity that has the potential to have an adverse impact on the marine environment. This is supported in the leading case C-127/02 **Waddenzee** [2004] ECR I-7405, the CJEU held at para. 6

“The act that the activity has been carried on periodically for several years on the site concerned and that a licence has to be obtained for it every year, each new issuance of which requires an assessment both of the possibility of carrying on that activity and the site where it may be carried on, does not itself constitute an obstacle to considering it, at the time of each application, as a distinct plan or project within the meaning of the Habitats Directive”

4.2. This caselaw demonstrates that fishing is considered a plan or a project and therefore not part of the baseline. Fishing should be included in all in-combination assessments. Fishing is not part of the baseline which is supported by a recent response by Natural England to deadline 4 of the Hornsea Three examinations in which they state *“fishing is mobile, variable and subject to change, fishing impacts may not be adequately captured in the baseline characterisation”*⁵.

4.3. Defra policy document on managing fisheries in European Marine Sites² (EMS) recognises that fishing is a damaging activity within EMSs and must be assessed and managed to ensure Article 6(3) of the Habitats Directive is met:

“In order to ensure that EMSs receive the requisite level of protection and ensure compliance with the EU Birds and Habitats Directives, Government has decided to revise the approach to the management of commercial fisheries affecting EMS.

Government and Fishery Regulators in England (primarily the Marine Management Organisation (MMO) and Inshore Fisheries and Conservation Authorities (IFCAs)) have legal obligations to ensure that fishing activities (including existing fishing activities), which could adversely affect EMSs are managed in a manner that secures compliance with the requirements of Article 6 of the EU Habitats Directive.

Fishing activity which is prohibited or restricted within EMSs under the revised approach could be allowed through a permitting mechanism at the site level. Any such permitting would be subject to the Article 6(3)- (4) processes described in Part 6 of the Conservation of Habitats and Species Regulations 2010. The regulatory authorities should also ensure ongoing management of

⁵Natural England response to Examiner’s questions for Hornsea Three: deadline 4 <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010080/EN010080-001479-Natural%20England%20-%20Response%20to%20the%20Examining%20Authority%E2%80%99s%20Further%20Written%20Questions%20and%20further%20information%20requested%20by%20the%20Examining%20Authority.pdf>

commercial fishery activities remains compatible with the conservation objectives of the site in line with their obligations to secure compliance with Article 6(2) of the Habitats Directive.”

4.4. A precedent was set for the inclusion of fishing in in-combination assessments when TWT began Judicial Review proceedings against the Department for Energy and Climate Change (DECC) in August 2015 against the approval of Dogger Bank Offshore Wind Farm Order due to the exclusion of fishing from the in-combination assessment as part of the HRA. TWT withdrew the claim due to assurances given by the government regarding the management of fishing within Dogger Bank SAC. One of those assurances was that steps would be put in place to ensure that this scenario would not happen again and that Defra and DECC would work together to ensure fishing would be included in future offshore wind farm impact assessments.

4.5. TWT recognises that assessing the cumulative impact of offshore wind farm development and fishing is complicated. To develop the revised approach to fisheries assessment and management in EMS, an Implementation Group was established with a range of expert stakeholders to develop a process to tackle this complicated issue. TWT recommends that a similar approach is required to develop an effective mechanism to assess the cumulative impacts of offshore wind farm development and fisheries.

5. Post consent engagement with the applicant

5.1. TWT is in ongoing discussions with the applicant on post-consent engagement on the Norfolk Boreas Project. TWT has built a good relationship with the applicant during the evidence plan process and we wish for this to continue post-consent.

5.2. We are working with the applicant towards a Memorandum of Understanding to clarify and further the working relationship, particularly on the further work to be undertaken in the post-consent and pre-construction phase of the Project. We hope this can be developed over the coming months to provide clarity and develop the post-consent relationship before the end of the examination process.

5.3. Due to the uncertainty on impacts on marine mammals and effectiveness of mitigation at the time of consent, we wish to continue working with Vattenfall post-consent on the development of the SIP, MMMP, marine mammal monitoring and marine mammal EPS licences. The MMO is likely to consult TWT on the development of these documents. However, we recommend that Vattenfall follows best practice which other developers follow and works with TWT during the development of the various documents.

5.4. With regards to the applicant's commitment to engagement with TWT in the development of the SIP, the applicant is only promising a copy of the document; information providing rather than engagement. This is not adequate and has the potential to cause problems for the applicant closer to construction. If our comments are only taken into account when the MMO consults just months before construction, this may be too late for our concerns to be resolved. We aim to work closely with developers to ensure that the issues we raise can be resolved at an early stage and this is catalogued through the process. We are currently in discussion with the applicant on if this issue can be resolved via a Memorandum of Understanding (MoU).

5.5. We are pleased that the monitoring requirements will be determined (post-consent) in consultation with TWT (and other consultees) as outlined in the Statement of Common Ground with the Applicant. We will work with the Applicant to capture this within the MoU.

Appendix B

A working document: A mechanism for implementing underwater noise management within the Southern North Sea

1. Introduction

The UK has the largest installed offshore wind capacity in the world with over 4GW forecast to come online in the southern North Sea alone in the next five years. This will require the pile driving of more than 500 turbines alongside other noisy construction activities, resulting in unprecedented levels of intensive underwater noise pollution. Add to this the ambitious plans for offshore wind to meet zero carbon emissions by 2050, harbour porpoise populations face serious risks from cumulative underwater noise impacts, recognised by both OSPAR⁶ and ASCOBANS⁷.

A strategic approach to underwater noise management is urgently required and **currently a mechanism to deliver this is lacking**. It is important to act now to create a management approach that will give industry, regulators, SNCBs and NGOs certainty that legal compliance can be achieved for European Protected Species (EPS) and the Southern North Sea SAC whilst ensuring that sectoral growth targets can be achieved in a sustainable and timely way.

2. The underwater noise fund proposal

2.1. Our proposed approach

We propose that an underwater noise fund should be introduced as a **mechanism to deliver a strategic approach to underwater noise management**. It is simple and based on maximum noise limits. Based on robust scientific evidence, this is a tried and tested approach that has been successfully implemented in a number of European countries. Defined noise limits would give developers certainty at the earliest stage of planning, reducing scheduling conflicts and enabling the sector to deliver their ambitions for new offshore wind in a sustainable, timely and more cost-effective way.

TWT have considered several options for how individual developers would pay into the fund. We have selected the option outlined below based upon ease of delivery by regulators and developers. It also incentivises noise reduction, ensuring legal obligations in relation to EPS and the Southern North Sea SAC are met.

The fund should be based on a maximum noise limit an offshore wind farm is expected to produce from construction activity. As shown in figure 1, we have considered the noise management approach used in Germany and we recommend the following noise limit.

Fund rate £x = less than 160dB @ 750m x number of piling events

Figure 1: Proposed underwater noise level fund

2.2. What would be achieved with the fund?

The fund would deliver the following:

- Strategic monitoring of underwater noise levels and harbour porpoise population activity.
- Strategic mitigation for underwater noise impacts

⁶ OSPAR Recommendation 2013/11 on furthering the protection and restoration of the harbour porpoise (*Phocoena phocoena*) in Regions II and III of the OSPAR maritime area. Reference Number: OSPAR Recommendation 2013/11

⁷ ASCOBANS Conservation Plan for Harbour Porpoises (*Phocoena phocoena*) in the North Sea as adopted at the 6 th Meeting of the Parties to ASCOBANS (2009)

- Research into underwater noise mitigation methods and the promotion of best practice
- Establish and provide long-term support for the Southern North Sea Underwater Noise Implementation Group⁸, with secretariat and officer support. The group would be responsible for:
 - Overseeing the development and implementation Southern North Sea strategic monitoring plan.
 - Overseeing the development and implementation of Southern North Sea strategic mitigation plan.
 - Provide advice for individual offshore wind farm developments on best practice mitigation and make recommendations to the regulators on individual development mitigation plans (see Appendix A as an example).

2.3. How could the fund be implemented?

We propose that all offshore wind developments within the Southern North Sea should be conditioned through either the seabed leasing agreement or planning consent to financially contribute to a strategic underwater noise management fund. As part of the conditions, developers would be required to participate in the implementation group. This approach is already being undertaken in Scotland (see Annex 1).

3. Benefits of the fund

3.1. Creates the much-needed mechanism to deliver a strategic approach to underwater noise management

Developers all agree that a strategic approach is the best way to deliver underwater noise management, but a mechanism is lacking. The approach is tried and tested by other North Sea countries, is based on sound science and can be easily monitored. **Importantly, it complements and enhances the area-based approach proposed by SNCBs.** For example, the proposed noise limit creates an 8km disturbance zone – this can be equated to an area-based impact and factored into cumulative impact calculations.

3.2. Consistency and increased certainty

Greater transparency in the assessment of noise levels and impacts would enable a consistent approach to in-combination and cumulative assessments across projects, developers and countries, increasing data certainty and reducing the level of precaution required. In addition, this proposal works towards a regional seas approach, ensuring consistent management across the natural functioning ranges of protected marine mammals.

3.3. Transparency and communication

Key to our proposal is the establishment of an implementation group which would provide the much-needed forum to progress underwater noise management. Case studies are provided as an annex to this document to highlight that what we are proposing is not new and much can be learnt and built upon from these examples.

3.4. Incentivises the development and use of noise reduction technology

A strategic approach based on maximum noise limits will incentivise the development and use of noise reduction technologies, enabling an overall reduction in noise pollution across the functional range of harbour porpoise. Perhaps most significantly, this approach will ensure a consistent approach across developers, increasing competitiveness and enabling future targets for offshore wind development to be achieved.

⁸ The implementation group should have representation from all offshore industries, regulators, SNCBs and NGOs.

Annex 1

What we are proposing is not new and much can be learned from other sectors. Here we outline three case studies as examples of a strategic approach to ensure the best use of resources and legal compliance.

1. Moray Firth Regional Advisory Group and Forth and Tay Regional Advisory Groups

This case study exemplifies how the participation in a strategic monitoring and mitigation group can be captured through offshore wind farm planning conditions.

These regional advisory groups were set up as part of planning and marine licensing conditions for the development of various offshore wind farms in Scotland⁹, to ensure effective environmental monitoring and mitigation is undertaken at a regional scale¹⁰. The terms of reference^{11 12} for the groups outline the requirement for the offshore wind farm developer to participate in the Group, established by Scottish Ministers, for the purpose of advising the Scottish Minister on research, monitoring and mitigation programmes for areas such as:

- Marine mammals
- Ornithology
- Diadromous fish
- Commercial fish

The planning conditions also require offshore wind farm developers to participate in the Scottish Strategic Environmental Group (SSMEG) established by Scottish Ministers for the same purpose as above but to ensure effective monitoring and mitigation is undertaken at a national scale.

2. Aggregate levy Sustainability Fund

This case study exemplifies how a fund can legally be conditioned as part of development activity to deliver strategic work to make environmental improvements to an industry.

The Aggregate Levy was introduced as a means to better reflect the environmental costs of winning primary construction aggregates, and to encourage the use of alternative, secondary and recycled construction materials. To reduce the environmental consequences of winning primary construction aggregates, a proportion of the revenue raised by the new Levy was allocated to a research fund, termed the Aggregate Levy Sustainability Fund¹³.

A steering group was established which had a number of key aims including improving the evidence base on the seabed environment, increasing understanding of the environmental effects of aggregate dredging, and developing monitoring, mitigation and management techniques. In the 9 years that the fund was in place, £22.5 million was spent on research associated with marine aggregate extraction, to improve the way in which the industry was planned, assessed and managed as well as a community grant scheme.

3. Solent Mitigation Disturbance Partnership

This case study exemplifies how both a payment and strategic partnership can be established as part of planning conditions for the to ensure no adverse effect on a Special Protection Area (SPA).

⁹ Moray Firth Regional Advisory Group – Beatrice Offshore Wind Farm (BOWL) and Telford, Stevenson and MacColl Offshore Wind Farm in the Outer Moray Firth (MORL). Forth and Tay Regional Advisory Group - Seagreen Alpha, Seagreen Bravo, Neart na Gaoithe and Inch Cape Offshore Wind Farms.

¹⁰ Planning conditions for Scottish offshore wind farms <http://www.gov.scot/Topics/marine/Licensing/marine/scoping>

¹¹ Moray Firth Regional Advisory Group <http://www.gov.scot/Topics/marine/Licensing/marine/scoping/mfrag>

¹² Forth and Tay Regional Advisory Group <http://www.gov.scot/Topics/marine/Licensing/marine/scoping/ftrag>

¹³ http://www.bmapa.org/issues/aggregates_levy.php

The Solent Mitigation Disturbance Partnership¹⁴ purpose is to facilitate joint work to implement measures which will mitigate the impact of additional recreational activity from planned housing development so that it does not have a significant effect on the three SPAs in the Solent. The membership comprises of local authorities, the parks authority, Natural England, RSPB, Hampshire and Isle of Wight Wildlife Trust and Chichester Harbour Conservancy.

Within a set zone around the SPAs, all housing developers are required to pay a fixed amount per dwelling¹⁵ before planning permission is granted which contributes towards the delivery of Solent Mitigation Disturbance Strategy¹⁶.

¹⁴ <http://www.birdaware.org/CHttpHandler.ashx?id=27311&p=0>

¹⁵ <http://www.birdaware.org/article/28101/Developer-contributions>

¹⁶ <http://www.birdaware.org/strategy>