

Norfolk Boreas Offshore Wind Farm

Appendix 23.5

Norfolk Vanguard Onshore Ornithology Consultation Responses

Environmental Statement

Volume 3

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Table of Contents

| | | |
|----------|--|-----------|
| 1 | Introduction | 1 |
| 2 | Consultation responses Norfolk Vanguard | 1 |
| 4 | References | 12 |

Tables

Table 2.1 Norfolk Vanguard Information

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Glossary of Acronyms

| | |
|-------|--|
| BoCC4 | Birds of Conservation Concern 4 |
| BTO | British Trust for Ornithology |
| CWS | County Wildlife Site |
| DCO | Development Consent Order |
| ECoW | Ecological Clerk of Works |
| EIA | Environmental Impact Assessment |
| EPP | Evidence Plan Process |
| ES | Environmental Statement |
| ETG | Expert Topic Group |
| HDD | Horizontal Directional Drilling |
| LNR | Local Nature Reserve |
| OLEMS | PEIR |
| PEIR | Preliminary Environmental Information Report |
| SAC | Special Area of Conservation |
| SoS | Secretary of State |
| SPA | Special Protection Area |
| SSSI | Site of Special Scientific Interest |
| WeBS | Wetland Bird Survey |

Glossary of Terminology

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| Cable pulling | Installation of cables within pre-installed ducts from jointing pits located along the onshore cable route. |
| Ducts | A duct is a length of underground piping, which is used to house electrical and communication cables. |
| Evidence Plan Process | A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and information to support the HRA. |
| Jointing pit | Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts. |
| Landfall | Where the offshore cables come ashore at Happisburgh South. |
| Landfall compound | Compound at landfall within which HDD drilling would take place. |
| Mobilisation area | Areas approx. 100 x 100m used as access points to the running track for duct installation. Required to store equipment and provide welfare facilities. Located adjacent to the onshore cable route, accessible from local highways network suitable for the delivery of heavy and oversized materials and equipment. |
| National Grid new / replacement overhead line tower | New overhead line towers to be installed at the National Grid substation. |
| National Grid overhead line modifications | The works to be undertaken to complete the necessary modification to the existing 400kV overhead lines. |
| National Grid substation extension | The permanent footprint of the National Grid substation extension. |
| National Grid temporary works area | Land adjacent to the Necton National Grid substation which would be temporarily required during construction of the National Grid substation extension. |

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|-------------------------------------|--|
| Necton National Grid substation | The grid connection location for Norfolk Boreas and Norfolk Vanguard |
| Onshore 400kV cable route | Buried high-voltage cables linking the onshore project substation to the Necton National Grid substation. |
| Onshore cables | The cables which take power and communications from landfall to the onshore project substation. |
| Onshore cable route | The up to 35m working width within a 45m wide corridor which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction. |
| Onshore infrastructure | The combined name for all onshore infrastructure associated with the project from landfall to grid connection. |
| Onshore project area | The area of the onshore infrastructure (landfall, onshore cable route, accesses, trenchless crossing zones and mobilisation areas; onshore project substation and extension to the Necton National Grid substation and overhead line modifications). |
| Onshore project substation | A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage. |
| Running track | The track along the onshore cable route which the construction traffic would use to access workfronts. |
| The Applicant | Norfolk Boreas Limited |
| The project | Norfolk Boreas Wind Farm including the onshore and offshore infrastructure. |
| Transition pit | Underground structures that house the joints between the offshore export cables and the onshore cables |
| Trenchless crossing compound | Pairs of compounds at each trenchless crossing zone to allow boring to take place from either side of the crossing. |
| Trenchless crossing zone (e.g. HDD) | Areas within the onshore cable route which will house trenchless crossing entry and exit points. |
| Workfront | A length of onshore cable route within which duct installation works will occur, approximately 150m. |

1 Introduction

1. Consultation is a key driver of the Environmental Impact Assessment (EIA) process, and throughout the lifecycle of the project, from the initial stages through to consent and post-consent.
2. As the Norfolk Boreas and Norfolk Vanguard projects are sister projects due to the proposed strategic development of both projects, much of the consultation undertaken as part of the Norfolk Vanguard Evidence Plan Process (EPP) is also relevant to the Norfolk Boreas project. Such consultation has directly influenced the Norfolk Boreas project and has been taken into consideration and integrated into the impact assessment for Norfolk Boreas.
3. In addition, information submitted as part of the Norfolk Vanguard examination, up to Deadline 5 (20th March 2019), has also been considered where relevant.
4. This appendix contains the results of the Norfolk Vanguard consultation and examination which have been used to inform the Norfolk Boreas assessment.

2 Consultation responses Norfolk Vanguard

5. Table 2.1 summarises the consultation that has been undertaken for Norfolk Vanguard that is relevant to and has informed the development of Chapter 23 Onshore Ornithology of the Norfolk Boreas ES and provides details of how it has been taken into consideration.

Table 2.1 Norfolk Vanguard Information

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
|-----------------|--|--|---|
| Natural England | Onshore Winter / Passage Bird Survey Scoping Report Response August 2016 | It appears that some SSSIs and County Wildlife sites are missing from the report, we advise these are added. | These were included in the updated Onshore Winter / Passage Bird Survey Scoping Report (Appendix 23.1) and have been included in the onshore ornithology baseline (section 23.6) and the impact assessment (section 23.7 and 23.8). |
| Natural England | Onshore Winter / Passage Bird Survey Scoping Report Response August 2016 | Natural England recommend that surveys start in October rather than the proposed November, to ensure the whole winter period is covered. | Details of the surveys undertaken are detailed in the onshore ornithology baseline (section 23.6). |
| Natural England | Onshore Winter / Passage Bird Survey Scoping Report | We would normally advise that at least two years of survey are undertaken to ensure | Consideration of crop patterns has been |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | Response August 2016 | that inter-annual variation is taken into account. However, we accept that there is limited value in a second year of winter surveys if the presence of geese and swans will be determined by the crop regime. We therefore advise that together with any survey and/or WeBS data, information about predicted crop patterns at the time of the proposed work are taken into account. | included in the impact assessment (section 23.7 and 23.8). |
| Norfolk County Council | Onshore Winter / Passage Bird Survey Scoping Report Response August 2016 | Approach seems pragmatic and sensible, we broadly support the methodology. Include a reference to County Wildlife Sites Pits near Easthaugh (CWS 669) and Sparham Pools (CWS 673) along the Wensum SAC. We would not expect wintering survey at these sites. Surveys at Cawston and Marsham Heath SSSI not required (hen Harrier roost no longer active). | Designated sites are assessed in section 23.7 and 23.8 of the chapter. |
| SoS | Scoping Opinion November 2016 | The Secretary of State notes and welcomes the surveys proposed in Table 3.9 of the Scoping Report and advises that their scope and methodology be agreed with relevant stakeholders. | The methodology and scope have been agreed with stakeholders as set out in methodology section (section 23.4). |
| SoS | Scoping Opinion November 2016 | The Scoping Report has identified the need to consider indirect impacts on statutory and non-statutory designated sites for nature conservation through cable routing; however, direct impacts should also be considered if the cable route does not avoid such sites. | Direct impacts, where appropriate, are considered within section 23.7 and 23.8 of the chapter. |
| SoS | Scoping Opinion November 2016 | The ES should identify the locations where there would be loss of important habitats for example, hedgerow and/or ancient woodland. | Loss of habitat is assessed in sections 23.7 and 23.8 of the chapter. |
| SoS | Scoping Opinion November 2016 | The ES should set out the measures for reinstating habitats which are removed during construction. | Reinstatement is set out in sections 23.7 and 23.8 of the chapter. |
| SoS | Scoping Opinion November 2016 | In accordance with EN-1, the Applicant should demonstrate the efforts made to ensure that activities will be confined to the minimum areas required for the works. | Activities will be confined to the minimum areas required for the works. |
| SoS | Scoping Opinion November 2016 | The Applicant should ensure that all mitigation measures proposed within the ES are secured and with this in mind the | A Outline Landscape and Ecological Management Plan |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | | Secretary of State welcomes the proposal for a project specific Ecological Management Plan. A draft of the plan should be provided with the DCO application. Consideration should also be made to any potential overlapping objectives of ecological and landscaping mitigation measures that may be proposed and secured through management plans. | (OLEMS) (document reference 8.7) has been provided with the DCO application. |
| SoS | Scoping Opinion November 2016 | In terms of potential disturbance to protected species, the assessment should take account of impacts on noise, vibration and air quality (including dust); cross reference should be made to these specialist reports. | Where data is available at this time, it has been referred to within sections 23.7 and 23.8 of the chapter. |
| SoS | Scoping Opinion November 2016 | The ES should include a thorough assessment of the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List. | Habitats and Species of Principal Importance are considered within sections 23.7 and 23.8 of the chapter. |
| SoS | Scoping Opinion November 2016 | The Secretary of State advises that the scope and methodology of all surveys are agreed with the relevant stakeholders and notes the intention to agree the recommendations of the 'Onshore Winter/Passage Bird Survey Scoping Report' with Norfolk County Council and Natural England. The outcomes of this report should be summarised within the ES and included in full as an appendix. | Recommendations of Onshore Winter/Passage Bird Survey Scoping Report were agreed with Natural England and Norfolk County Council in August 2016, and a methodology update agreed in March 2017. This report is summarised in section 23.6. |
| Hindolveston Parish Council | Scoping Opinion November 2016 | It is requested that due care is taken to protect woodland (especially ancient woodland), meadows and areas that are habitats for wildlife, plants, insects even if these sites to not have special designations. For instance this would include Roadside Nature Reserves (managed by Norfolk Wildlife Trust) e.g. at Brays Lane in Hindolveston and similar las near Guestwick leading to Wood Dalling. | Woodland and these named reserves are considered within sections 23.7 and 23.8 of the chapter. |
| Natural England | Scoping Opinion November 2016 | Further sites that will need consideration along the route are Cawston and Marsham Heaths, Foxley Wood, Honeypot Wood and Beetley and Hoe Meadows SSSIs, all of | These sites are considered within sections 23.7 and 23.8 of the chapter. |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | | which are designated as representative of rare habitats. | |
| Natural England | Scoping Opinion November 2016 | <p>We recommend that the Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within all designated sites that have potential to be affected by the cable route and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any significant impacts.</p> <p>Natural England advises that the Environmental Statement should consider any impacts upon local wildlife or geological sites and avoid these sites where possible, or mitigate for any impacts.</p> | Designated and local sites are considered within sections 23.7 and 23.8 of the chapter. |
| Natural England | Scoping Opinion November 2016 | We recommend that the Environmental Statement should assess the impact of all phases of the proposal on protected species... We recommend a thorough assessment of the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance'. | Protected species and Habitats and Species of Principal Importance are considered within sections 23.7 and 23.8 of the chapter. |
| Natural England | Scoping Opinion November 2016 | <p>We advise that sites with breeding bird features are listed along with the sites identified with passage and wintering ornithological interest features.</p> <p>Table 3.14: Passage and over wintering birds are listed as red on BoCC 4 (Eaton <i>et al.</i>, 2015), along with their relative abundance (high, medium, low), which has been based on the data from the BTO UK Bird Atlas 2007-2011. We advise the inclusion of the same information for breeding birds for the scoping area.</p> <p>Table 3.15: When listing the UK bird species of principal importance (excluding BoCC red list species), which may be present within the onshore scoping area, we recommend the Applicant clarifies whether this list considers species that may be present during just the passage and wintering period, or whether it also includes species that may be present during the breeding season as well.</p> <p>We also recommend the inclusion of a list</p> | Details of the breeding bird receptors are set out in section 23.6 and assessed in section 23.7 and 23.8 of the chapter. |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | | of UK habitats of principle importance recorded within the onshore scoping area which have suitability to support breeding and passage and wintering bird species. | |
| Norfolk County Council | January 2017 / Onshore Ecology and Ornithology ETG Minutes | Requested that those designated sites immediately outside of the survey area be considered within the assessment, e.g. Booton Common and Pigney's Wood (not yet designated). | These sites and others within 1km of the survey area have been considered within sections 23.7 and 23.8 of the chapter. |
| Natural England | February 2017 / Offshore Ornithology ETG Minutes | Disturbance of sand martin nesting at Happisburgh will need to be considered in relation to the onshore HDD works for landfall as well as access requirements to the landfall works (under the onshore ornithology impact assessment). The breeding bird survey should include this area. The breeding season is early summer and therefore, depending on locations, there could be seasonal constraints on the landfall HDD works to avoid breeding season. | Nesting sand martin are considered within sections 23.7 and 23.8 of the chapter. |
| Natural England | Norfolk Vanguard - Onshore Wintering Bird Surveys Survey Methodology Approach Update Response March 2016 | Agreement with the updated wintering bird survey methodology. In winter 2016/17 there may have been no birds because the areas they surveyed were not planted with crops the birds would feed on. However, in a different year, different crops may be grown in the survey area and birds may then use these fields. So, whilst we are not suggesting more than 1 year of survey, we advise considering this in assessments. | Consideration of crop patterns has been included in the impact assessment (section 23.7 and 23.8 of the chapter.). |
| Natural England | Phase 2 Survey Scope Response April 2017 | Natural England have no comment to make on the Phase 2 survey methodology, and are satisfied with the methodology as set out in the Extended Phase 1 Habitat survey report. | No action required. |
| Norfolk County Council | Phase 2 Survey Scope Response April 2017 | Confirmation that the Phase 2 methodologies seem appropriate and in line with best practice. So I am happy that the Phase 2 surveys can be undertaken as proposed and should provide appropriate evidence to inform the ecological baseline. | No action required. |
| Natural England | PEIR response November 2017 | In terms of the HRA...We are satisfied with the criteria for screening out Broadland SPA/Ramsar site. | No action required. |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| Natural England | PEIR response November 2017 | Around the River Wensum crossing, and other areas, the timing of the work will be important in relation to disturbance of breeding or wintering birds. | Mitigation around the timing of the works to avoid sensitive periods has been considered. Mitigation for potential impacts is presented in sections 23.7 and 23.8 of the chapter. |
| Norfolk County Council | PEIR response November 2017 | Ecologists from the Natural Environment Team at the County Council have attended a number of Ecology Expert Topic Group (ETG) meetings and have had the opportunity to comment on methodology and approaches for establishing and assessing the ecological situation. Officers consider the approach is acceptable. The results of many of the ecology field surveys are not presented in the PEIR and it is understood that the County Council will not see the survey results until the Environmental Statement is produced. | Survey results are presented in section 23.6 of the chapter and detailed in full in Appendices 23.2 and 23.4. |
| Royal Society for the Protection of Birds | PEIR response November 2017 | We note that the eastern section of the onshore cable route falls within land identified by Natural England as functionally-linked to the Broadland SPA for foraging pink-footed geese. While limited evidence of foraging pink-footed geese was recorded on the site surveys, given the known importance of this area for the species, we consider that mitigation measures should be included within the Outline Landscape and Environmental Management Strategy (OLEMS). These should include measures to ensure that any mitigation planned to deter breeding birds from using the area surrounding the cable route does not adversely affect pink-footed geese by reducing availability of foraging habitat. In order to ensure that sufficient habitat is available in the wider area during construction, it may be beneficial to secure appropriate cropping outside the area directly affected by the works, to act as a refuge. | Mitigation for potential impacts upon pink-footed geese is presented in sections 23.7 and 23.8 of the chapter. |
| The Wildlife Trusts | PEIR response November 2017 | We are pleased to see that the cable routes have been refined so that there are now fewer areas remaining with a choice of routes. In general, our comments on the onshore ecology section of the PEIR are | No action required. |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | | made in relation to designated sites and habitats and not necessarily on impacts on each individual receptor, owing to the fact that much work still needs to be done to further refine routes and assess the best mitigation measures for each area of ecological value. We note with regard to species data that ecological information is at an early stage and that sufficient information may not be currently available to allow a planning decision to be made. We would expect that this information will be presented at the submission stage. | |
| North Norfolk District Council | PEIR response November 2017 | West of The Street, Ridlington (TG 34631 30520) – This area does not appear to have been surveyed in the field as part of the Water Vole, Breeding Birds or Extended Phase 1 survey, yet appears to be existing or former grazing pasture with possible reasonable habitat (semi-improved) and has an extensive ditch network and defined historical field pattern. | Undesignated habitat at Ridlington Street is proposed to be crossed using trenching. Impact upon the potential species at the habitat by Ridlington Street are presented within sections 23.7 and 23.8 of the chapter. |
| North Norfolk District Council | PEIR response November 2017 | Breeding Birds Surveys (BBS) – It is not clear within the reports if all features suitable to support breeding birds have been surveyed e.g. hedgerows and areas of scrub, semi-improved grassland. It appears that only the larger areas of habitat capable of supporting breeding birds have been subject to a BBS. This needs to be clarified. | All features capable of supporting breeding birds have not been surveyed. Instead the surveys have focused on key sensitive areas. Mitigation for common breeding birds using these habitats is provided in sections 23.7 and 23.8 of the chapter. |
| North Norfolk District Council | PEIR response November 2017 | Unable to comment on the results of many of the ecological surveys as the results have yet to be inputted into the PIER (<i>sic</i>) report. | Survey results are presented in section 23.6 of the chapter and detailed in full in Appendices 23.2 and 23.4. |
| Natural England | Review of baseline ecology reports February 2018 | The data presented are clear and sufficiently detailed to have confidence in their accuracy, within the limitations expressed in the report. The report highlights limitations in the surveys and the recommendations given in the light of these should be undertaken to fully and accurately assess the impact of the project | Mitigation around the timing of the works to avoid sensitive periods has been considered. Mitigation for potential impacts is presented in sections 23.7 and 23.8 |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | | on breeding birds. The number and range of breeding bird species present at all sites highlights the importance of work methods and timing avoiding impacts to species and the full range of their associated habitats in all the areas. We wish to highlight that the floodplain grazing marsh adjacent to the River Wensum on the south side is managed under Countryside Stewardship to target wintering waders and wildfowl, so it should be presumed that these will be present from November to February inclusive. | of the chapter. |
| Natural England | Onshore Ornithology Baseline Report Review Meeting February 2018 | Natural England would not prescribe a recommendation for a set size of area [to secure as habitat for pink-footed geese, if required], and that this would be up to Vattenfall's ecologists to determine. Mitigation would be dependant on the level of utilisation of this habitat recorded within the wintering / on passage bird survey results. | No action required. |
| Natural England | Onshore Ornithology Baseline Report Review Meeting February 2018 | 24hr working (i.e. works involving lighting) may be required for [the landfall] works, and that drills are noisy activities. Therefore Natural England would expect further mitigation measures to minimise any effects of lighting or noise upon nesting sand martins. These would involve avoiding sensitive times of the sand martin nesting season, and directing lighting away from the nest sites. | Mitigation for potential impacts is detailed in Chapter 25 Noise and Vibration and is presented in sections 23.7 and 23.8 of the chapter. |
| Natural England | Onshore Ornithology Baseline Report Review Meeting February 2018 | Natural England agree with the recommendation to check desktop records to ensure that no significant species have been under represented due to the reduced access coverage at certain sites, lack of dawn/dusk surveys at all sites and also due to the lack of April surveys. We advise that there may be data from other surveys available, particularly for SSSIs and LNR. We also suggest considering local bird reports and at a broader scale the Atlas data and BTO Bird Track. | Additional desk-top records have been obtained and are presented in section 23.6 of the chapter. |
| Natural England | Relevant Representation in respect of Norfolk Vanguard | Internationally designated sites: Broadland SPA/Ramsar site: This site was scoped out of the [Habitats Regulations Assessment] HRA on the basis that there | It was agreed with Natural England during the Evidence Plan Process (Norfolk Vanguard - Onshore |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | August 2018 | <p>was evidence of low levels of wintering birds associated with the SPA/Ramsar using the study area. However, this may have been due to the cropping regime at the time of survey. We requested that this point was taken account of by including additional measures, e.g. survey and/or [Wetland Bird Survey] WeBS data and information about predicted crop patterns at the time of the proposed work. We suggest that the Outline Landscape and Ecological Management Strategy (OLEMS) is amended to include further survey and provide suitable mitigation measures if required.</p> | <p>Wintering Bird Surveys Survey Methodology Approach Update Response March 2016 (Document Reference: PB4476.003.038)) that one year of surveys was appropriate, and as such the Applicant does not intend to conduct further surveys for wintering birds. As part of this agreement, as stated Natural England recommended considering reviewing local cropping patterns to provide evidence to indicate what the likely area of available habitat will be during construction Norfolk Vanguard. This is considered in Section 23.5.3.</p> |
| Natural England | <p>Relevant Representation in respect of Norfolk Vanguard August 2018</p> | <p>Nationally designated sites: For the assessment of noise disturbance on birds which are features of designated sites, we suggest designated sites within 500m are screened in for assessment, namely River Wensum SSSI; Dereham Rush Meadow SSSI; Dillington Carr, Gressenhall SSSI. However, it is stated in Chapter 25 Onshore Noise and Vibration (Table 25.3 Consultation responses) that 'no sites are located within the noise and vibration study area'. However, Figure 25.1 Noise and Vibration Study Area rather confusingly does not appear to show a noise and vibration study area. However, in the report, Dillington Carr, Gressenhall SSSI and Dereham Rush Meadows SSSI are scoped out from further assessment as they are located more than 300m from the onshore project area (paragraph 169) but we are unclear as to how this distance criteria was derived. Therefore, no detailed assessment of noise on bird features appears to have been carried out, i.e. noise modelling. We advise that a detailed noise</p> | <p>The 300m buffer was agreed with Natural England in January 2017 (Onshore Wintering Bird Surveys Survey Methodology Approach Update (Document reference: PB4476.003.038)). Potential noise disturbance to breeding birds of SSSIs within 300m of Norfolk Boreas has been informed by the 2017 breeding bird surveys and is considered in full in Section 23.7.</p> |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| | | assessment is carried out for sites within 500m of the project area and mitigation provided for any impacts identified or evidence is provided to demonstrate that there will be no additional noise experienced from construction at the designated site boundary. | |
| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | We agree that there will be a temporary, long term loss of habitats along the cable route which support wintering and breeding birds. Whilst arable land can be re-instated fairly quickly, hedgerow habitat will take up to 7 years to re-establish. In addition to direct habitat loss, there is the potential to disturb birds during construction from noise and human presence. Again, no detailed noise assessment appears to have been carried out. | An assessment of the impacts of the proposed works on bird disturbance is presented in Section 23.7. |
| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | Sand martin are known to nest in Happisburgh Cliffs which may be affected by noise, vibration and 24hr working (i.e. works involving lighting). It would be preferable to avoid the breeding season during construction. However, the stated distance between nest sites and landfall (130m), Chapter 25 Onshore Noise and Vibration Table 25.17 Predicted distances at which vibration levels may occur shows that some vibration may be felt at this distance and the significance of this for birds should be evaluated. We agree that lighting should follow good practice guidance for wildlife. | Potential effects on sand martin have been considered in Section 23.7. The assessment of the potential effects on sand martin presented in Section 23.7 has been updated from that presented in the PEIR to include further information provided on this topic during the Norfolk Vanguard examination. |
| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | We are pleased to note that an Ecological Clerk of Works (ECoW) will be present on site during construction (OEMS (<i>sic</i>) para 229) and suggest that nesting birds should be added to protected species in para 230 as requiring works to stop immediately if found during construction. Measures should be included in OEMS to deal with the risk of damaging or destroying ground nesting birds (i.e. skylarks) during construction. | OEMS text has been amended for Norfolk Vanguard and Norfolk Boreas to make explicit that if crop stubble is not kept low within arable fields prior to construction, then should works commence within these fields within the bird breeding season, a pre-construction check will be undertaken. |

| Consultee | Document/ date | Comment | Response / where addressed in the ES |
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| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | We agree with the mitigation measures suggested in Outline Landscape and Ecological Management Strategy (para 254/255.) | No action required. |
| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | Chapter 25 Noise and Vibration has not considered the potential vibration effects arising from [Horizontal Directional Drilling] HDD activities for sand martin. There doesn't seem to be any reference in Chapter 25 to vibration effects caused by the drilling at 10-20m below ground level. | As noted above, potential effects on sand martin have been considered in Section 23.7 of the chapter. |
| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | We agree that the loss of arable breeding habitat is of sufficient duration to be classified as an effect of medium magnitude. | No action required. |
| Natural England | Relevant Representation in respect of Norfolk Vanguard August 2018 | We are happy to agree the locations for these set-aside mitigation areas post-consent which would follow the RPSB's Skylark: Advice for Farmers in creating skylark habitat. | No action required. |

4 References

Norfolk Vanguard Limited (2017). Norfolk Vanguard Offshore Wind Farm Preliminary Environmental Information Report. Available online at:
<https://corporate.vattenfall.co.uk/projects/wind-energy-projects/vattenfall-in-norfolk/norfolkvanguard/documents/preliminary-environmental-information-report/>
Access 16/01/2019.

Norfolk Vanguard Limited (2018). Norfolk Vanguard Offshore Wind Farm Environmental Statement. Available online at:
<https://infrastructure.planninginspectorate.gov.uk/projects/eastern/norfolk-vanguard/>.
Accessed 16/01/2019.

Royal HaskoningDHV (2016). Norfolk Vanguard Offshore Wind Farm: Environmental Impact Assessment Scoping Report. October 2016.