



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE)
RULES 2010

NORFOLK BOREAS OFFSHORE WIND FARM

Planning Inspectorate Reference: EN010087

Deadline 9

**Natural England's Norfolk Boreas Position Statement
Regarding Mitigation and Compensation**

29th April 2020

Ref NE.NB.D9.09.PS

Introduction

- 1.1 Natural England's remit is to ensure sustainable stewardship of the land and sea so that people and nature can thrive. We are working to achieve a healthy and biodiverse marine environment which can enable a truly sustainable UK offshore wind sector, to support the achievement of 'net zero' and address the climate change emergency. We use our expertise to help facilitate offshore windfarms that are sensitively located and constructed, whilst protecting marine ecosystems from proposals with significant environmental impacts through our statutory advice. This will build the marine environment's resilience to climate change and its ability to mitigate its effects.
- 1.2 Having reviewed the documents submitted by Norfolk Boreas during examination, Natural England provides the following statutory advice regarding further mitigation measures, additional mitigation that could be implemented, and the compensatory measures selected for the features of sandbanks, reefs, lesser black-backed gulls (LBBGs) and kittiwake. In providing this advice, Natural England has drawn from the EC Guidance Document on Article 6(4) of the Habitats' Directive 92/43/EEC.

Special Area of Conservation (SAC)

- 1.3 Haisborough Hammond and Winterton Special Area of Conservation (SAC) is designated for with Annex I Sandbanks (which are slightly covered by sea water all the time) and Annex I Reefs. This site is located off the north east coast of Norfolk. Natural England has identified significant concerns at the scale of impact – both temporal and spatial – from export cable installation and the deposition of cable protection on both designated features of the site.

Article 6(3) Assessment

- 1.4 The Secretary of State (SoS), acting as the relevant competent authority for this project, will need to ensure that it has acted in accordance with Article 6 of the Habitats Directive, as informed by the relevant judgements of the Court of Justice of the European Union ("CJEU"). With regards the interpretation of Article 6(3) of the Habitats Directive, in *Landelijke Vereniging tot Behoud van de Waddenzee v Staatssecretaris van Landbouw* (C-127/02), the CJEU stated that:

59. Therefore, pursuant to Article 6(3) of the Habitats Directive, the competent national authorities, taking account of the conclusions of the appropriate assessment of the implications of [the plan or project], in the light of the site's conservation objectives, are to authorise such activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects...

- 1.5 More recently, in the CJEU stated in the *Holohan & Others v An Bord Pleanala* (C-461/17) that:

34 The [appropriate] assessment carried out under that provision may not have lacunae and must contain complete, precise and definitive findings and conclusions capable of dispelling all reasonable scientific doubt as to the effects of the proposed works on the protected area concerned...

37 ... all aspects which might affect [the conservation] objectives must be identified and since the assessment carried out must contain complete, precise and definitive findings in that regard, it must be held that all the habitats and species for which the site is protected must be catalogued. A failure, in that assessment, to identify the entirety of the habitats and species for which the site has been listed would be to disregard the above mentioned requirements and therefore ... would not be sufficient to dispel all reasonable scientific doubt as to the absence of adverse effects on the integrity of the protected site...

- 1.6 In accordance with Article 6(4) of the Habitats Directive, if the Secretary of State, acting as competent authority, is satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest it may agree to the plan or project notwithstanding a negative assessment of the implications for the European site or the European offshore marine site (as the case may be). If the Secretary of State makes this decision they must secure any necessary compensatory measures in order to ensure that the overall coherence of Natura 2000 is protected. Natural England can provide ecological advice on the adequacy of those compensatory measures.

Current Position - Annex I Sandbanks and Reefs

- 1.7 Natural England advise that sufficient baseline evidence has been provided to inform an assessment of the impacts to Annex I Sandbanks and Reefs feature of Haisborough Hammond and Winterton (HHW) SAC. However, Natural England continue to disagree with the conclusions of the Applicants' Environmental Impact Assessment and supporting documents as submitted during examination.

a) Cable protection

- 1.8 In Natural England's view, even with the proposed reduction in the number of export cables from six to two by using a High Voltage Directional Current (HVDC) the remaining proposed levels of cable protection would constitute a lasting and potentially irreversible impact on both designated site features, thereby hindering the conservation objectives of the site. Annex I Sandbanks and Reefs features within the site are both in unfavourable condition. Consequently Natural England cannot be certain that cable protection will not adversely affect the integrity of the site.

b) Sandwave levelling

1.9 Although sandwave levelling has been proposed as a means of reducing the potential requirement for cable protection, Natural England highlights that there is insufficient evidence to demonstrate that full recovery of the Sandbank system is achievable and within the affected Annex I Sandbank systems. This is because there is insufficient certainty that there will not be a need for cable protection over the lifetime of the project.

c) Sediment disposal

1.10 Natural England is content that the Applicant has demonstrated that there are suitable disposal locations for sandwave levelling operations, that would both retain the sediment within the Sandbank system to allow for its recovery and avoid impacts to the Annex 1 Reef feature. However, changes to sediment composition at the disposal locations has not been resolved (i.e. the 95% similar sediment grain size condition).

d) Micro-Siting

1.11 Natural England cannot be certain that avoidance of Annex I Reef habitats through micro-siting the cable is achievable and therefore that it wouldn't hinder the management measures put in place to restore Annex I Reef from fisheries pressures, particularly if cable protection was needed.

e) Consideration of Adverse Effect on Integrity

1.12 Natural England's advice is that adverse effects on site integrity should be addressed at the time of Application.¹ The failure to do so would leave a number of substantial issues to be resolved by the Marine Management Organisation (MMO) prior to construction. It should be noted that if uncertainties about the impact of the development are not fully resolved at the time of consenting, there is a risk that there will be considerable project delays prior to and during construction whilst proper processes are followed and these are finally resolved.

Additional Evidence Provided by the Applicant [D6-8]

1.13 The Applicant has provided various documents as evidence of further mitigation measures proposed to reduce the risk of adverse effect on integrity. These included an updated Haisborough Hammond and Winterton (HHW) SAC site integrity plan (SIP) and Additional Mitigation document including Assessment of the addition mitigation in HHW SAC; HHW SAC Cable Specification, Installation and Monitoring Plan (CSIMP), cable protection decommissioning note, BT cable letter of comfort, HHW SAC position statement..

1.14 The additional documents provided and steps taken by the Applicant are welcomed and considerably reduce the risk of an adverse effect on integrity.

¹ Please see Annex 1 which sets out Natural England's legal position on this matter submitted into the Boreas offshore windfarm examination at Deadline 4 [REP4-045]

This is because they provide greater confidence that cable protection will not be needed, and that the potential consequential impacts from sandwave levelling impacts could be minimised or avoided. However, they do not completely remove the need for cable protection over the lifetime of the project and therefore, the additional evidence is not sufficient to remove all reasonable scientific doubt as to the absence of adverse effects on the integrity on the protected Annex I Sandbanks and Reefs as a result of installation of cable protection over the life time of the project.

Mitigation Proposed by the Applicant

a) Cable protection

- 1.15 The Applicant has undertaken a further review of data sets to determine where cable protection is most likely to be needed to be placed and thus further reducing the amount of cable protection within the HHW SAC from 10% to 5%. In addition the Applicant has committed to further reduce cable protection required at cable crossings within HHW SAC, with the support of BT, by removing any disused telecom cables that cross the export cable route.
- 1.16 The Applicant has committed to follow a cable burial hierarchy i.e. to always attempt to re-bury a cable before using cable protection, and a requirement to seek a new marine licence for any new areas of cable protection which might be required. In addition, the Applicant has committed to agree the cable route, to continue to explore opportunities to minimise the impacts from cable installation, as well as to agree the location, extent, type and quantity of any cable protection with the MMO in consultation with Natural England prior to deployment. All of these commitments are welcomed and have also been secured in the updated development consent order / deemed marine licence (DCO/dML).
- 1.17 A commitment has also been made by the Applicant to place no cable protection in the areas the Applicant has termed priority areas to be managed as reef i.e. fisheries byelaw/management areas to aid the recovery of Annex I reef.
- 1.18 Natural England welcomes the refinement of the cable installation methodology (including prohibiting the use of jack up vessels in the HHW SAC) and the reduction in cable protection estimates and locations is positive.

b) Decommissioning

- 1.19 The Applicant has drawn up a decommissioning plan that provides evidence on the feasibility of the removal of cable protection, which it suggests is more likely to be possible for concrete mattresses (or similar type product). Natural England welcomes the potential to successfully remove any cable protection. If removal could be achieved, then whilst the impacts would no longer be permanent, which is welcomed, they will still last for the lifetime of the infrastructure (30 years) and potentially longer as a residual impact. Therefore, because this impact is lasting/long term and site recovery wouldn't be assured, Natural England's view is that reasonable scientific doubt remains regarding the impact

of the proposals on the conservation objectives for the site. Accordingly a precautionary approach is required. If it is considered that certain types of cable protection could be modified to enable a greater success of recovery/removal at decommissioning, whilst reducing wider designated site impact, then we advise that this would need to be reflected in the DCO/dML to ensure this mitigation is secured.

- 1.20 Overall, whilst the additional work undertaken to refine the project parameters is welcomed and serves to considerably reduce the impacts of the project on the interest features of HHW SAC and the likelihood thereof, Natural England's overall position remains that an adverse effect on integrity cannot be excluded beyond all reasonable scientific doubt.

Additional Measures that could Avoid/Reduce/Mitigate impacts

1.21 Natural England notes that the EC Guidance² highlights that a proposal put forward under Article 6 (4) should be *'the least damaging for habitats, for species and for the integrity of the Natura 2000 site, regardless of economic considerations, and that no other feasible alternative, exists that would not affect the integrity of the site.'*

1.22 To assist in this regard we are providing advice in this section on potential alternative measures that may help avoid/reduce/mitigate the impacts of the proposed development and we feel therefore warrant consideration.

i. Avoid

1.23 Natural England notes that the cable route could be taken to the south avoiding the HHW SAC entirely. However, it was presented in the evidence plan process for Norfolk Vanguard that the Crown Estate was opposed to this due to potential implications for other industries such as aggregates. It is noted that the Boreas Cable route is shared with Norfolk Vanguard and therefore the position would be the same. We have suggested previously that this alternative warranted consideration.

ii. Reduce

1.24 Natural England considers that the Applicant has taken all reasonable steps to reduce the impacts of the proposed development on both of the designated features of HHW SAC and we welcome this effort.

iii. Mitigate

1.25 A commitment to surface-laid cables and the use of marker buoys would remove the need for cable protection altogether. This has been achieved for the Lincs Offshore Wind Farm in The Wash and North Norfolk Coast SAC and is currently also being employed by The Wash Harbour Masters to protect the Race Bank offshore windfarm cables. We continue to advise that this alternative should be considered.

1.26 We note that the Applicant hasn't considered the suggestion of a condition to

² https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/guidance_art6_4_en.pdf

dispose of Sandwave clearance sediment in habitats of similar particle size. Whilst the Applicant has indicated that it is committed to ensuring disposal of sediment in areas adjacent to the clearance it remains unclear if these areas will have similar grain size and how this will be demonstrated, we do not advise that the condition as written will achieve the desired outcome. However, we remain committed to help resolve this issue going forwards.

Compensatory measures

- 1.27 As stated above (Section 1.1), under Article 6(4) of the Habitats Directive, the project may be permitted if the Secretary of State is satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest.
- 1.28 Norfolk Boreas has discussed a number of compensatory measures with Natural England. Given that the key issue for Annex I Sandbanks and Reefs at HHW SAC, based on our understanding of site condition, is lasting change of habitat, Natural England are keen that measures focussing on ensuring no loss of designated features are taken forward.
- 1.29 Ultimately Norfolk Boreas has decided to propose an extension to the boundary of HHW SAC to incorporate an area where there is suitable confidence, based on best available evidence, in the presence of Annex I Sandbanks and Reefs. The Applicant is proposing a 1:10 compensation ratio to allow for any uncertainties in deliverability.
- 1.30 Natural England agrees that an extension to the HHW SAC site boundary would be the most environmentally beneficial measure to deliver compensation for both Annex 1 Sandbanks and Reefs habitat and ensure coherence of the Natura 2000 network.
- 1.31 Whilst Natural England consider, on ecological grounds, that this measure has the potential to compensate for Annex 1 Sandbanks and Reefs habitat in HHW SAC, more detail is required regarding how this would be delivered. We acknowledge there are likely to be practical challenges and potential policy issues in securing this compensation measure as well as any required additional site management measures. Therefore consultation with Defra, other regulators (such as MMO and Eastern Inshore Fisheries and Conservation Authority) and key stakeholders is required.

Special Protection Areas (SPAs)

- 1.32 A number of protected sites and species were identified by Natural England as being at risk of significant impact from this development alone or in-combination, including kittiwake, gannet, guillemot, razorbill and seabird assemblage from Flamborough and Filey Coast (FFC) Special Protection Area (SPA) and lesser black-backed gull (LBBG) from Alde-Ore Estuary SPA. However, measures discussed here are specifically focussed on kittiwake at FFC SPA and LBBG at Alde-Ore Estuary SPA.

Current Position - Kittiwake at Flamborough and Filey Coast SPA

- 1.33 Natural England advise that it cannot be certain that there will be no adverse effects on the integrity of FCC SPA through impacts to the features of kittiwake, gannet, guillemot, razorbill, and seabird assemblage, in-combination with other plans and/or projects.
- 1.34 Further to this, Natural England highlights that the in-combination total of collision mortality across consented plans/projects has already exceeded levels which are considered to be of an Adverse Effect on Integrity to kittiwake at FCC SPA, and that any additional mortality arising from these proposals would therefore be considered adverse.
- 1.35 We also highlight that the possibilities for mitigation / compensation, and the confidence in any related advice, has been reduced by the (as yet undetermined) Hornsea Project Three application.

Current Position - Lesser black-backed gull at Alde-Ore Estuary SPA

- 1.36 Natural England have advised [D9] that it could not be certain that there will be no adverse effects on the integrity of Alde-Ore Estuary SPA through impacts to LBBG, in-combination with other plans and/or projects.

Additional Evidence Provided by the Applicant [D7-8]

- 1.37 The project carried out updated Collision Risk Modelling (CRM) to take account of the mitigation measures proposed in terms of reduced numbers of turbines and raised minimum draught heights. Natural England agrees with the revised CRM figures calculated by the Applicant for the project for both kittiwakes from the FCC SPA and for LBBGs from the Alde-Ore Estuary SPA. We welcome the reductions in the collision risk predictions, and **confirm that we again conclude that adverse effect on integrity can be ruled out for both kittiwake at the FCC SPA and LBBG at the Alde-Ore Estuary SPA from Norfolk Boreas alone**. Whilst it is recognised that the Projects contributions to the in-combination mortality totals is small, when compared to other projects; Natural England again advises that it is not possible to rule out an adverse effect on integrity for kittiwake at FCC SPA and LBBG at Alde-Ore Estuary SPA from in-combination collision impacts with other plans and projects. For kittiwake at the FCC SPA we consider that mortality levels have exceeded those that would result in an adverse effect.
- 1.38 The project has also carried out calculations to demonstrate where there is headroom in the in-combination assessment from the as built projects when compared against projects as consented. Natural England acknowledges the work that the Applicant has done to consider potential headroom in the in-combination/cumulative collision risk figures by assessing the 'as built' rather than the worst case scenario (WCS). However, whilst Natural England agrees that there is likely to be some headroom, the extent of any potential headroom is not agreed. In addition, it is important to note that there is not yet an agreed way forward to calculate headroom and the approach undertaken by the Applicant has not been subjected to wider scrutiny and approval.

Mitigation Proposed by the Applicant

- 1.39 The Applicant has committed to a number of mitigation measures that Natural England welcome, including further reduction in turbine numbers, and further raising minimum draught height of turbines.
- 1.40 We welcome the Project's engagement with the supply chain for both turbine manufacturers and construction vessels regarding constraints around draught height increases and turbine installation. We consider that the Applicant has made significant efforts to reduce the impacts of their proposal and demonstrated due consideration to ensure that all proposed mitigation measures are feasible. These reductions will result in a proportional reduction in the impact to birds.
- 1.41 Natural England welcomes the further clarity provided on how the proposed additional mitigation will be secured and that the proposed change to project parameters and methodologies have been fully secured within the DCO/dML where appropriate. We also note that a 'Schedule of Mitigation' has been provided and agreed, which clearly sets out all of the mitigation measures.
- 1.42 However, it should be noted that the measures are unlikely to fully exclude collision impact, so in combination considerations remain relevant. Because of this, Natural England's advice on adverse effects on site integrity remains unchanged.

Additional Measures that could Avoid/Reduce/Mitigate impacts

- 1.43 Natural England consider that the Applicant has taken all reasonable steps to avoid, reduce and mitigate the impacts of the proposed development on both kittiwakes at FFC SPA and LBBG at Alde-Ore Estuary SPA.

Compensatory measures - Kittiwake at Flamborough and Filey Coast SPA

- 1.44 Please see section 1.1 for information regarding implementation of Article 6(4) of the Habitats Directive.
- 1.45 Norfolk Boreas has discussed a number of compensatory measures with Natural England. Given that the key issue for kittiwake at FFC SPA, based on our understanding of site condition, is decreased productivity, Natural England are keen that measures focussing on increasing productivity, such as prey availability, are taken forward.
- 1.46 However, Norfolk Boreas has decided that construction of artificial nests in the southern North sea / south-east England, but located outside of the FFC SPA kittiwake population would provide the most confidence in deliverability.
- 1.47 Though this isn't Natural England's preferred option, we agree that in-principle, the provision of additional nest sites for kittiwakes in the southern North Sea / south-east of England might have the potential to be of benefit to the regional kittiwake population and hence in our view, would ensure coherence of the Natura 2000 network (N2K), particularly if considered as a phased approach that also includes more medium term measures on prey availability.
- 1.48 Whilst this measure would not directly benefit the FFC SPA population, we do recognise that it could be considered as a measure to ensure the coherence of the N2K network for kittiwake.
- 1.49 We do advise however, that greater confidence is needed:

- 1.50 a. That there would be a net benefit to the overall kittiwake population size (not just simply causing a redistribution); and
- 1.51 b. That there are sufficient food resources within likely foraging range around any new location to support the required level of productivity.
- 1.52 Whilst Natural England consider this measure has the potential to compensate for kittiwake at FFC SPA, more detail is required regarding the size and productivity of any new colony, the location and type of any new structure, the size of new structure, how the project intends to quantify the success of the measure, and the distance of the measure from the FFC SPA population.
- 1.53 It should also be noted that depending on the chosen location there may also be an increased collision risk that would need to be taken account of when determining the productivity of any new colony.

Compensatory measures - Lesser black-backed gull at Alde-Ore Estuary SPA

- 1.54 Please see section 1.1 for information regarding Article 6(4) of the Habitats Directive.
- 1.55 The Applicant has discussed a number of compensatory measures with Natural England. Given that the key issue for LBBG at Alde-Ore Estuary SPA, based on our understanding of site condition, is decreased productivity, Natural England are keen that measures focussing on increasing productivity, such as predator control, are taken forward.
- 1.56 Ultimately the project has decided that funding a coordinator, whose role would be to facilitate the organisation of a stakeholder working group tasked with overseeing a review of the population's health, factors which have contributed to the decline, and proposals for conservation measures, would be their preferred compensation option. Depending on the outcome of this review, a trial may be undertaken to test options, before a final measure (or suite of measures) is taken forward for implementation, which could include predator control at nesting sites.
- 1.57 Natural England's view is that whilst the funding of a project coordinator and scoping study is helpful, there must be a commitment to delivering measures on the ground that would offset the predicted collision risk mortality.
- 1.58 Site management measures should be already happening within the designated site. The Section 106 agreement which was secured to address the impacts from the Galloper offshore windfarm to the LBBG population by facilitating changes to site management measures for the benefit of LBBG is still in the scoping phase of options which is effectively undertaking the same role as the Applicant's scoping study. Therefore, for Norfolk Boreas' proposals to demonstrate that they would have any added benefit beyond the S106 agreement, the outcomes of the S106 need to be determined first. Any compensation measure proposed by the Applicant would also need to be kept separate to the S106 to clearly demonstrate deliverables from the two projects.
- 1.59 Therefore, whilst we recognise the benefit of the Applicant's proposal in helping to identify possible compensation measures; we do not feel it will achieve the desired outcomes without further specification of how Norfolk Boreas will

compensate for reduced productivity of the LBBG population as a result of their project.

- 1.60 Natural England agrees with the Applicant that mammalian predator control is the most suitable compensation measure and we believe that this could be achieved through partnership working with local land owners in the wider Alde-Ore. Therefore we feel that further detail on this measure needs to be clarified and conformation that delivery of the measure can be assured.

Additional Considerations - Kittiwake at Flamborough and Filey Coast SPA

- 1.61 The approach and draft conditions are limited to construction of artificial nest sites, as the Applicant considers this to be the most appropriate measure to deliver compensation prior to the construction of Norfolk Boreas. Natural England welcome the additional effort the Applicant has gone to in order to present a broad range of compensation measures and would recommend other measures, for example sandeel fisheries management would be more likely to directly benefit the FFC SPA population.

Additional Considerations - Lesser black-backed gull at Alde-Ore Estuary SPA

- 1.62 The approach and draft conditions are limited to providing a 'facilitator' role for site management measures, as the Applicant considers this to be the most appropriate measure to deliver compensation prior to the construction of Norfolk Boreas. Natural England welcome the additional effort the Applicant has gone to in order to present a broad range of compensation measures and would recommend other measures, for example direct delivery of predator control measures, would be more likely to directly benefit the Alde-Ore Estuary SPA population.

Overarching Comments

Consenting considerations

a) Decommissioning feasibility

- 1.63 One of the key issues for impacts to Haisborough Hammond and Winterton SAC is the impact of cable protection on Annex I Sandbanks and Reefs. The Applicant has determined this to be of a 'long-term temporary impact' due to their commitment to removal of any cable protection at decommissioning. Natural England notes that successful removal of cable protection has not yet been adequately demonstrated, or if removal after 30+ years would assure the recovery of the site to pre-impact levels or indeed result in a greater overall impact to the site due to adaptation of habitats to the cable protection.

b) Securing mitigations

- 1.64 All mitigations proposed by the Applicant have been secured in the DCO/DMLs (although some comment has been raised on how this mitigation has been secured see our D9 DCO submission for comments on the DCO), which Natural England welcome as this is necessary to ensure they are carried out

sufficiently or alternatives pursued should they not be successful. This mitigation also required agreeing an In-Principle Monitoring Plan that will clearly define the monitoring requirements and the rationale behind them, for all receptors likely to be impacted by the development. This monitoring will confirm the efficacy of the mitigation and highlight if there is a need for any further mitigation.