



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES

2010

Natural England's additional guidance on the apportioning of northern gannet and black-legged kittiwake to FFC SPA for the Hornsea Project Four Offshore Wind Farm

For:

The construction and operation of Hornsea Project Four Offshore Wind Farm, located approximately 69 km from the East Riding of Yorkshire in the Southern North Sea, covering an area of approximately 468 km².

Planning Inspectorate Reference EN010098

20th June 2022

Overview

Natural England noted that the Applicant has made use of generic ratios of adults to immature birds that have been estimated from Appendix A in Furness (2015) in their apportioning calculations for northern gannet (*Morus bassanus*, gannet hereafter) and black-legged kittiwake (*Rissa trydactyla*, kittiwake hereafter) during the breeding season. We do not agree with this approach and have highlighted our concerns in our Risk and Issue Log (Points B3, B50, B51, B73, B77). This Annex provides additional advice on the Natural England approach to apportioning for gannet and kittiwake.

Background

Natural England do not support the application of the ratios derived from Furness (2015) for apportioning of birds as adults with respect to specific projects, particularly at sites near to large breeding colonies where breeding adults are likely to be dominant. This is because the ratio is based on a modelled population, with manipulated demographic rates to achieve zero population change over time. This is unlikely to be realistic and population growth, or decline, could result in different age structures. Further, the generic model ratios do not consider spatial and temporal variations. Furness (2015) notes that:

“the at sea distribution of seabirds differs between age classes, with youngest birds tending to spend their time in the winter quarters even during summer, breeding adults tending to stay closest to their breeding area, and immature birds probably at sea in areas that have good food supplies but are away from large colonies.”

Thus, where possible, Natural England instead advises the use of good quality site-specific ageing data to define the proportions of adults present within an area at a specific time of year. However, where sufficient data has not been collected, we suggest other evidence (e.g. other survey data from relevant areas or demographic data from connected colonies) can be used to provide an indication of the potential age structure of birds within the project area at relevant times of the year.

Natural England’s preferred approach to the apportioning of northern gannet and black-legged kittiwake impacts to FFC SPA

Natural England advise the Applicant that they should use their survey data to provide an indication of the proportions of adult gannet and kittiwake that may be present in the Hornsea Project Four area during their respective breeding seasons.

We have taken the opportunity to further examine the ageing data provided in the baseline characterisation report and provide the following interpretation of the breeding season data to derive adult apportioning rates (see Table 2). These data suggest around 50% of all gannet and kittiwake in the Hornsea Project Four area and a 4 km buffer were assigned an age category during their respective breeding seasons. Natural England consider this to be a useful sample size from which adult ratios can be derived. Of the 52% of gannet aged 92% were adults and of the 50% of kittiwake aged 97% were likely to be adult type birds. Thus, we advise the use of these values over the modelled ratios derived from Furness (2015) which, according to the Applicant, suggest 68% of gannet and 69% of kittiwake are likely to be adults.

Based on this information, Natural England provide their preferred approach to the apportioning of impacts from Hornsea Project Four on gannet and kittiwake to Flamborough and Filey Coast Special Protection Area (FFC SPA) in Table 3. Relevant impacts, following all other Natural England guidance for these species, should be apportioned to FFC SPA based on these rates and summed to provide total annual impacts for the project alone which can

then be used in in-combination assessment. We will review this advice if and when additional relevant evidence is submitted into the Examination.

Table 2. Summary of ageing data for all birds within the array and a 4 km buffer presented in the Applicant’s baseline characterisation report¹ Appendix D. Observations of adult and immature or juvenile birds have been summed across all months and for the breeding season alone.

Species	Period	Total count	Total aged	% aged	Adults	Immature or juvenile	% adult
Northern gannet	All months	1,093	527	48	491	36	93
	Breeding (Mar-Sept)	642	333	52	306	27	92
Black-legged kittiwake	All months	4,467	2,134	48	2,022	112	95
	Breeding (Mar-Aug)	3,451	1,728	50	1,684	44	97

Table 3. Summary of Natural England’s advice on apportioning impacts on northern gannet and kittiwake to Flamborough and Filey Coast Special Protection Area (FFC SPA).

Species	Season definition	% from FFC	% adults	% breeders (i.e. not sabbatical)	Overall % apportioned to FFC SPA
Northern gannet	Breeding (Mar-Sept)	100	92	100	92
	Post-breeding (Oct-Nov)	BDMPS			4.84
	Pre-breeding (Oct-Feb)	BDMPS			6.23
Black-legged kittiwake	Breeding (Mar-Aug)	100	97	100	97
	Post-breeding migration (Sept-Dec)	BDMPS			5.44
	Pre-breeding (Jan-Feb)	BDMPS			7.19

References

Furness R. (2015) *Non-breeding season populations of seabirds in UK waters: Population sizes for Biologically Defined Minimum Population Scales (BDMPS)*. Natural England Commissioned Reports, Number 164.

¹ Offshore and Intertidal Ornithology Baseline Characterisation Report, PINS Document Reference: A5.5.1.