

Hornsea Project Three
Offshore Wind Farm

Appendix 35 to Deadline I submission

– Marine Navigation Figures and Tables

Date: 7th November 2018







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Front cover picture: Kite surfer near a UK offshore wind farm © Ørsted Hornsea Project Three (UK) Ltd., 2018.





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# 1. Figures and tables to support responses detailed in Written Questions 1.5.1 and 1.5.2

#### Written Question 1.5.1: Collision Risk Modelling

Table 1.1 presents the vessel to vessel collision return periods (the estimated number of years per major collision) for the pre wind farm and post wind farm scenarios for other (publically available) offshore wind projects.

Table 1.1 Other Offshore Wind Farm Collision Risk Change

| Project                                  | Vessel to Vessel Collision Return Period |                |          |  |
|--|--|----------------|----------|--|
| Tioject                                  | Pre Wind Farm                            | Post Wind Farm | Change % |  |
| Hornsea Three                            | 193                                      | 152            | 21.4     |  |
| Hornsea Two (Consented)                  | 44                                       | 31             | 41       |  |
| Hornsea One (Consented)                  | 75                                       | 60             | 25       |  |
| Norfolk Vanguard                         | 15                                       | 12             | 22       |  |
| Beatrice                                 | 2,014                                    | 2,013          | 0.1      |  |
| Inch Cape                                | 797                                      | 695            | 15       |  |
| Dogger Bank Creyke Beck A (Consented)    | 2,223                                    | 1,890          | 17.6     |  |
| Dogger Bank Creyke Beck B (Consented)    | 1,401                                    | 835            | 68.1     |  |
| Combined Creyke Beck A and B (Consented) | 941                                      | 568            | 66       |  |
| Dogger Bank Teesside A (Consented)       | 569                                      | 461            | 23.41    |  |
| Dogger Bank Teesside B (Consented)       | 1112                                     | 624            | 78.31    |  |
| Combined Teesside A and B (Consented)    | 312                                      | 242            | 29.07    |  |

### Written Question 1.5.2: Adverse Weather Routeing

Figure 1.1 presents an overview of the indicative DFDS adverse weather routes and indicative standard routes alongside actual vessel tracks that were recorded using the Cuxhaven – Immingham routes (recorded from AIS data). The actual tracks were primarily recorded from AIS during December 2017 – February 2018 and feature four commercial ferries – namely the *Anglia* 





Seaways, Hafnia Seaways, Jutlandia Seaways and Stena Foreteller – these are shown in black within the figure. Actual adverse weather tracks for the Hafnia Seaways recorded were during April – October 2016 are shown in pink within the figure.

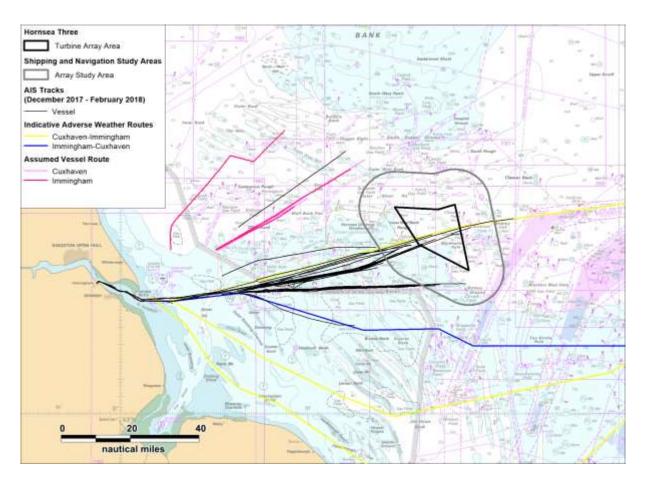


Figure 1.1 Overview of DFDS Seaways adverse weather routes, standard routes and vessel tracks (December 2017 –February 2018)

