

Kommentering af udkast til produkt af forskningsbaseret faglig rådgivning fra DCE, Aarhus Universitet

Titel på produkt	Changes in the distribution and abundance of common scoter and diver species in the Horns Rev I, II and III				
	windfarm areas, Denmark (fir	nal draft)			
Ansvarlig for produktet	Ib Krag Petersen				
(projektleder i DCE)	_				
Rekvirent	Energinet Eltransmission A/S				
Kontaktperson hos rekvirent	Majken Them Tøttrup				
Deadline for fremsendelse af	f 1. november 2024 Dato for afslutning af håndtering af 15. november 2024				
kommentarer	kommentarer				

Husk venligst at kommentering skal foretages på baggrund af rapportens PDF-version.

	Rekvirent		DCE	
	Kommentar	Placering i produktet	Håndtering af kommentar	Ansvarlig for håndtering af kommentar
1	Consider adding after 'this project': 'and data collected in previous investigations'	97	Now reads: This report was commissioned by Energinet. It describes results obtained from the bird survey program in connection with the planned construction of the offshore wind farms (OWF's) in the North Sea I area, and specifically addresses the distributional behaviour of divers (red-throated diver/black-throated diver) and common scoter within and around the Horns Rev I, the Horns Rev II and Horns Rev III offshore wind farms.	ΙΚΡ



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			The report builds upon data collected under this project in combination with bird survey data from other previous projects within that same area between 2000 and 2012. The report has eight main chapters. Chapter 1 is Introduction and objectives of the report. Chapter 2 provides an	
2	The Chapter numbers do not correspond with the Contents list	98-101	Has been corrected	ІКР
3	Table 1 - Consider changing last line to 'Efter opførelse af HR I, HR II og HR III, so it corresponds with the terminology of the above lines (also for the English explanation)	134	Done	ІКР
4	Consider writing Offshore Wind Farms areas (not just OWF) as this is the first time using OWF.	139	Done	ІКР
5	Please consider adding a sentence about the objective of the study. According to the Scoping Report 'Imperical data to support assessments of the potential effect of offshore wind farms on the distribution of birds can qualify sensitivity analysis and assessments of cumulative effects'	144	Nu: OWF's. These data in combination offers a unique opportunity to address the potential change in the displacement of birds over time, based on empirical data.	ΙКР
6	Please consider adding a few sentences about if anything can be concluded regarding the potential displacement effect of the offshore wind farms – referring back to the objective.	174	We feel that the issue has been handled in last section in that chapter: We evaluated the long-term distribution of common scoter and diver species, bird species classified as sensitive to human disturbances, in and around the HR I, II and III OWF's at Horns Rev. We found that divers and common scoters decreased in and around the HR II wind farm after its construction. While common scoter densities increased between Phase 2 and 3, the diver density reduction continued in and around that area. Within the HR III area,	ΙКР



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			with large and widely spaced turbines, no decline in the density of common scoter or divers was observed post- construction.	
7	Please use the name North Sea I / NSI consistently throughout the report	199	No NSI on the text now	ІКР
8	Please insert Latin name for Common scooter (as done for red- throated diver)	206	Has been fixed.	ІКР
9	Please consider also inserting a reference to Figure 2.3 together with reference to Table 1.1	250	Done	ІКР
10	In Table 1-1, the total number of surveys is 57. Elsewhere is says 56 aerial surveys. Please correct.	252	There were 57 surveys all together. One survey was omitted from the analysis because none of the target species were found in the area. Therefore, 56 surveys enter into the analysis. This has now been clarified in the text.	ІКР
11	There are two tables with the number 1-1. Please correct.	134 & 252	A ghost. The "List of Terms" table caption has been deleted, as there is no direct reference to it.	ІКР
12	The text refers to Table 2-1. This should be Table 1-2. Please correct.	261	Corrected	ІКР
13	Please consider moving this section to Introduction and Objective	262-267	This is already covered in the Introduction, and is here only mentioned in order to put it into context. Thus, no changes here.	ІКР
14	Please consider moving this section further up – after line 239	268-274	The bathymetry of the study area is important, but we feel it is relevant to first describe the study area and then it's more specific features later.	ІКР
15	For the first draft of the document, Energinet had this comment: Section 2 Methods / Data analysis:	321-580	We have made improvements to the North Sea 1 report and have used those as a template for improvements in this report.	ІКР



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	 Please consider adding a paragraph for each data analysis method (abundance estimation, spatial analysis, distance analysis, area of persistence etc. explaining (in layman terms). For the reader it will be helpful to understand: Why do you perform this analysis – what is the result an indication of? What do the figures/scores of the different analysis express, e.g. persistence scores. What does the value of '0/blue' mean? Consider also adding an explanatory sentence along with the figures/results for each species/species group DCE replied: We added the following text: "A persistence score of 1 indicates that the density in that grid cell was estimated to be above average in every bootstrap replicate in every survey (so uniformly above the mean; high persistence), while a value of 0.1 indicates that just 10% of the estimates were above the estimated mean, and thus indicates low persistence in that location. " COMMENT FOR FINAL DRAFT: We appreciate the effort, but we do not think that the added text is helpful for the reader. Please make reference to the actual bird data in the explanation, i.e. low persistence means that the common scoter (or divers) are 			
16	Regarding Figure 3-3: Please explain what the sentence 'As the survey area is the same for each survey, the abundances are comparable'. Which survey areas are the same? Have a correction-factor been applied to the data?	554-555 (also Figures 3-32 – 3- 33)	Changed to: "As the analysis area has the same extension between surveys, the estimated abundances are comparable."	ІКР



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17	Unclear sentence – please rephrase	568	Rephrased to: "There was no material overlap between high values of the CoV metric and the transect lines/locations with non-zero counts. Therefore results can be considered to be valid i.e. they do not compromise the model (Figure 3.9)."	ІКР
18	Please elaborate on what persistence is an expression for and (repeat) how the persistence scores should be perceived	596	Now added: "The persistence analysis describes, at a fine geographical scale, areas of higher or lower usage by the species, evaluated over many surveys." Also added in Chapter 3.7.2	ІКР
19	Please add a figure reference in the text	600, 602, 606 & 610	Done	ІКР
20	Please check if the text for figures 3-19, 3-20, 3-21 and 3-22. It seems that it should say 'redish' for the '+' and bluish for the '-'. The same error seems to be in the figures for divers.	642 + table text + 860 -	We appreciate that the + signs and the o signs are very small and hard to see. Therefor we added this text to the figure caption. Yet, the information is important to have, as the signs indicate where a difference was significant. The signs under the reddish colours are + and the sign under the bluish colours are o.	ІКР
21	An increase in the footprint of the HR III footprint -= an increase in the density?	661	Now reads: "Phase 3 does demonstrate a density increase in the footprint of the HR III"	ІКР
22	Consider using the colour indication (redish/bluish) as in figures 3- 19 – 3.22. It is impossible to see the legends o and +	700 + 890 (figures 53-3 & 53-4)	The colour scale depends on the data in the figure. We can't unify to the same scale.	ІКР
23	Figure 3-28 and the text (line 732 – 741) is difficult to understand for layman and since this is not a scientific report, we must maintain that the report is readable and understandable by layman working with environmental impacts from offshore wind.	732-741	The sentences have been changed to make the it easier understandable.	ІКР



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	Please revisit the wording and the explanation and try to make it easier to understand.			
24	Please add figure references 3-45 & 3-46 to the text	825 and 829	Done	ІКР
25	Please add reference to the '2014 report'	882	Done	ΙΚΡ
26	Please change 'common scoter' to 'diver'	Figure 3-52 text	Done	ΙΚΡ
27	Consider deleting sentence as it seems un-necessary (same in line 938-939)	931-933	We would like to keep this sentence. The difficulty mentioned in lines 938-393 relates to HR I specifically.	ІКР
28	Consider replacing 'would support the speculation' with 'Overall, these result how that while the construction'	962-964	Accepted	ІКР
29	Consider deleting the first sentence, as it is repeated in line 968.	966	We feel this is an intro to the section, and helpful to the reader to bear this in mind when reading the rest of the section.	ІКР
30	Are there any other studies which have studied responses to point- stimulus? If yes – consider including this in the discussion.	976-977	Yes, there is. For instance distances to roads and hedgerows for terrestrial species. Also, long-tailed duck to Nysted/Rødsand II OWF's. The latter could be relevant here, but the distance element is more difficult to interpret from the Long-tailed duck data, and we fear this will confuse rather than help the reader here.	ІКР
31	Question: What could be the explanation for the lack of apparent displacement response to the construction of HRIII – the OWF layout? You write that the lack of detectable responses to HRIII is remarkable, especially given the similar avoidance responses toelsewhere in Europe. Are these the studies mentioned below – and do they also lack of responses?	988-990	In the section above this place we say: "this is the case, we may hypothesise that the more irregular distribution of turbines and the far greater inter-turbine distances associated with HR III could contribute to the lack of apparent displacement response of both species that was so evident following the construction of HR II." What is meant is, that other studies have shown avoidance responses in contrast to HR III. Sentence has been altered.	ΙΚΡ



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			We do refer to the German cases, yes. And there the response is described as eminent. We do not have information of OWF designs from that area.	
32	Please insert 'displacement' effects	1015	Done	ІКР