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Send to Rijkswaterstaat WVL
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Subject Reply to KEC 5.0 marine mammals report review

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The KEC 5.0 report Part B on marine mammals [1] was reviewed by Kate Searle (Center for Ecology & Hydrology, UK) and Saskia Mulder (marine ecologist at Seawhistle Advice in Norway). Their review provides recommendations for each section of the KEC 5.0 marine mammal report. Below each recommendation is copied from the review and a response is given containing a plan to address it.

7.1 General

The report gives a very clear and detailed overview of the background, methods and results of the calculations. The methodologies applied are thoroughly considered and robust. The conclusions are, apart from the summary, a bit hard to find in the document.

Recommendations:

- Add a paragraph that gives a clear overview of the conclusions and maybe further elaborate on the implications of the findings for the development of offshore wind or add this in the Part A report.

Response:

- We acknowledge that not all information from the reviews and calculations that are documented in the report have led to clear conclusions. The Summary section of the report provides the relevant conclusions and recommendations for the upcoming environmental impact assessment studies in preparation for the offshore wind site decisions. We will provide more context in the next KEC update in a separate chapter Conclusions and recommendations.

7.2 Summary

It is very good to have an overview of the changes in the calculations and a clear overview of the results and the conclusions at the start of the document.
The summary does not say anything about the international scenario, which is understandable but also a bit strange.

Recommendation:

- Add a conclusion on the international scenario.

Response:

- The KEC 5.0 report is aimed at the Dutch offshore wind projects, in the context of the international developments. It was a deliberate choice not to focus on the results of the international scenario. We will clarify this in the next KEC update.

7.3 4. KEC Methodology

Section 4 is a bit confusing because it is very fragmented. It would be easier to read when all paragraphs on piling can be read after each other and then the paragraphs on geographical surveys and the paragraphs on UXO clearances. This may also count for section 5

Recommendation:

- Restructure the section by putting all information on piling together and not fragmented. This also counts for geographical surveys and UXO clearances.

Response:

- Thank you for this suggestion. We have struggled with the choice for a structure of the report and we tried different ones. There are various options, involving different compromises affecting the readability. We have chosen to structure the chapters on methods and calculations according to the

steps in the staged assessment procedure, considering the different sound sources and species per step. For a next KEC we will consider if structuring the report per sound source would improve the readability.

7.4 5. KEC Calculations

Recommendation:

- Restructure the section by putting all information on piling together and not fragmented. This also counts for geographical surveys and UXO clearances.

Response:

- See our previous response. For a next KEC we will consider if structuring the report per sound source would improve the readability.

7.4.1 5.3.1 Calculation of animal disturbance days

It is not very clear what the different 'curves' (scenarios?) in table 5.4 mean, there is some explanation in the text before and after the table, but why are Brandt et al. and Graham 1st pile + max. 26 km taken into account?

Recommendation:

- Add an explanation in the text on different 'curves' in table 5.4 and about the differences in the scenarios.

Response:

- We acknowledge that this is confusing. We should have referred to Figure 4.2 (section 4.3.1) which shows the different dose-effect curves. As explained in the text, Table 5.4 illustrates the uncertainty in the calculated number of harbour porpoise disturbance days. We could have made clearer that we decided to use the same dose-effect relationship as was used for KEC 4.0, because of a lack of convincing argumentation to change the approach to applying one of the other, generally less conservative, curves.

7.4.2 5.5 Population effect calculation

It is not clear what the results in table 5.7 mean. The results have not been elaborated upon, and no conclusion is added. What scenario offers the highest level of reliability? What does this mean? In paragraph 4.4 of Part A it is stated that in situations where the international scenario exceeds the ecological limits, the Netherlands may take action, for example by informing the relevant competent authorities of the countries concerned. Is that the case here?

Recommendation:

- Elaborate on the results and add a conclusion.

Response:

- As indicated in our response to the comments on review section 7.2, the study focuses on the effects of the Dutch offshore wind projects on marine mammals on the Dutch Continental Shelf (DCS). Table 5.7 is provided as an intermediate step towards the calculated effects of the Dutch projects on the DCS porpoise population in Table 5.8. These are the results that are compared with the ecological standard in section 5.6.
- The ecological standard does not apply to the international scenario. Assessment of the consequences of the international scenario and possible follow-up actions towards the other countries are outside the scope of this study.

There is also no clear discussion of the results or a conclusion based on table 5.8. What scenario offers the highest level of reliability? What does this mean?
In paragraph 5.6 a comparison with the ecological standard is made, which gives a bit more clarity. But here the comparison is done in numbers instead of percentages, which is confusing because the ecological standard is described in percentage in paragraph 4.8.1 and the results are also in percentage in tables 5.7 and 5.8.

Recommendation:

- Add a clear conclusion and make the comparison more consistent.

Response:

- We agree that the report should have discussed the effect of the choice for one of the three considered dose-effect relationships on the resulting population reduction. The assessment in section 5.6 is limited to the results for the default (Graham et al 2018 – 1st pile) relationship, also used in KEC 4.0. The other two results are mainly added to illustrate the associated uncertainty. We will be clearer about this in next KEC updates.

'Table 5.9 shows the results of iPCoD 6.0.2 calculations for the seal populations. The maximum calculated population decrease is less than 2%'. In the table the maximum decrease seems to be 2,7%. The results have not been elaborated upon.

Recommendation:

- Elaborate on the results and add a conclusion.

Response:

- The '2%' in the text refers to the effect of the Dutch projects on the Dutch populations (the lower two rows in Table 5.9). We agree that the text could have been clearer about this. We do not have more to conclude from these results. The assessment is made in section 5.6.2.