

Agenda Item 2.11

Review of New Information on Threats and
Other Issues Relevant to Small Cetaceans

Other

Document 2.11

Report of the Offshore Renewable Energy
Working Group

Action Requested

- Take note
- Provide guidance

Submitted by

Offshore Renewable Energy Working Group



Note: Delegates are kindly reminded to bring their own document copies to the meeting, if needed.

REPORT OF THE OFFSHORE RENEWABLE ENERGY WORKING GROUP

Introduction

1. The 27th Meeting of the ASCOBANS Advisory Committee (AC27) requested the Secretariat to establish a Working Group (WG) to “review the interactions between all forms of marine renewable and small cetaceans, given the considerable current interest in the further rapid development of marine renewables all across the agreement area”. The WG was requested to provide a report to the next meeting of the AC:
 - “considering the full range of possible impacts and also appropriate mitigations”, and,
 - “taking into account ASCOBANS Res.8.6, seek to establish criteria for identifying areas of high sensitivity for cetaceans, including consideration of their prey and habitats, with respect to offshore renewable energy development”.
 - The WG was also asked to “consider whether holding a workshop at the ECS conference would help in this process and if so, to organize such a workshop”.¹
2. The Offshore Renewable Energy Working Group (OREWG) worked through email correspondence and MS Teams (calls, draft document). The WG agreed it was important that they not duplicate what was already done in Regional Seas Conventions: for example, ICES and OSPAR had relevant WGs, and HELCOM had the Baltic Sea Action Plan. In addition, [PrePARED](#) -project was identified: a group that evaluates the impact of windfarms on the surrounding ecosystems and interactions between trophic levels. [Coastal Futures](#) -project was also considered relevant since it has a large spatial scope (complete North and western Baltic Sea).
3. It was discussed that the OREWG output would be a draft manual/best practices document in time to discuss it at a workshop in 2023. The document would identify and outline issues that should be addressed, drawing on existing papers that have identified and evaluated them. The document would also provide a collection of viable approaches or options that have been successfully applied in the past, which can inform future construction of offshore renewable energy sources.
4. The WG agreed that no workshop application would be submitted to ECS 2023, but instead considered piggybacking to another conference (Ocean Noise Conference, May 2023, Spain) because that would also bring noise regulators together. However, a draft document was not ready in time to plan for a workshop around it. The workshop should have taken place in May 2023 at the latest, to avoid losing experts to field work.
5. The report in Annex 1 aims to frame the scope, outline the issues and critical questions, and to indicate solutions when planning offshore wind: to include best practice/guidance on how to best plan offshore wind projects with small cetaceans in mind. The OREWG has not yet sought establishing criteria for identifying areas of high sensitivity for cetaceans. The OREWG welcomes guidance from the Advisory Committee as to how or to which direction to build the text so that it would act as a useful manual / best practices document.

¹ See [AC27/AP9](#).

Annex 1:

Report to ASCOBANS AC28 that frames the scope, outlines the issues, critical questions, indication of solutions

Background

The climate crisis as well as the new geopolitical and energy market realities require us to drastically accelerate our clean energy transition and increase Europe's energy independence from unreliable suppliers and volatile fossil fuels. REPowerEU is the European Commission's plan to make Europe independent from Russian fossil fuels well before 2030. The REPowerEU plan sets out a series of measures to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition, while increasing the resilience of the EU-wide energy system.

Europe needs this transition, but at the same time, there is not enough data and research on the effects on marine mammals regarding offshore wind power/farms (OWF) and especially on their cumulative impacts and different pathways. There have been studies regarding the impact and threats to marine mammals from construction and operation of OWFs, but most of these studies are older and less relevant for upcoming projects. The newer projects are much larger, involve larger turbines and are located much further offshore and sometimes in deeper water. The increasing number of projects furthermore means that their cumulative impacts need to be looked at carefully and evaluated. In general, appropriate environmental impact assessments (EIA) should be ensured.

Different phases to take into consideration with respect to cetaceans

Planning:

- Describe activities happening during the planning and what this means in terms of impact: e.g. geophysical surveys for screening the seafloor, increased ship traffic, unexploded ordnance (explosion needed?).
- Cumulative effects: Important to have a good overview of other potential effects in different, wider scale area.
- Characteristics of the site of the wind farm, e.g., biodiversity (only consider a site that is less important for biodiversity), habitat type for marine mammals (breeding, feeding, migration), human activities (fishing, recreational activities). If the area is a known site for cetaceans (used for breeding, feeding, resting, migration) it should not be used. MSP or other planning should already take into consideration all these points.
- Linear structures: cable setting to the sea floor.
- Type of the offshore wind turbine foundations (e.g., floating, fixed).
- In addition, it is important to know the schedule of activities in advance to estimate the potential impact on cetaceans.

Construction:

- Impulsive noise from pile/driving & mitigation.
- Vibro-driving (lasts several hours).
- Disturbance from increased ship traffic and "infrastructure" needed for construction (platforms, housing ship, etc.).
- If for some reason the construction takes place in an area where there are cetaceans, or the area is important for the life stages of the animals, apply all mitigation measures to minimize impacts from underwater noise (impulsive), turbidity (impacts on other xxx such as prey depletion), vessel traffic (ambient noise, vessel strikes), other disturbance (marine litter, pollution).

Operation:

- Underwater noise.
- Vessel traffic (maintenance work).
- Impacts from cables (such as electromagnetic).

Decommissioning:

- Apply same considerations as in construction phase.

Mitigation and compensation options: To include tech options and refer to other guidelines. May also need guidance on different stages of offshore wind i.e. piling / operations / geophysical surveys. Impacts to mitigate:

- Underwater noise.
- Pollution (from explosions, vessel traffic, marine litter, cable installing).
- Disturbance(e.g., vessel traffic) during all phases.
- Habitat loss and habitat change (e.g., new ship transit lines, new habitats) – maybe compensation options although there are few.
- Physical barrier effects.

Reporting:

- Data collected during reference states should be made public and collected according to standardized protocols to allow for robust analyses of animal distribution.
- Cooperation with the industry/wind associations to gain acceptance of the guidelines.

Useful guideline documents

Other guideline documents and data sources e.g.

- E.A. Virtanen, J. Lappalainen, M. Nurmi, M. Viitasalo, M. Tikanmäki, J. Heinonen, E. Atlaskin, M. Kallasvuori, H. Tikkanen, A. Moilanen. 2022. Balancing profitability of energy production, societal impacts and biodiversity in offshore wind farm design, Renewable and Sustainable Energy Reviews, Volume 158, <https://doi.org/10.1016/j.rser.2022.112087> .
- JNCC docs on noise mitigation: <https://jncc.gov.uk/our-work/marine-mammals-and-noise-mitigation/>
- Danish Energy Agency. 2022. Guideline for underwater noise. Installation of impact or vibratory driven piles. Danish Ministry of Energy, Copenhagen. https://ens.dk/sites/ens.dk/files/Vindenergi/guidelines_for_underwater_noise_energistyrelsen_maj_2022_1.pdf
- CMS Family Guidelines on Environmental Impact Assessment for Marine Noise-generating Activities: <https://www.cms.int/en/document/adverse-impacts-anthropogenic-noise-cetaceans-and-other-migratory-species-0>
- Best Available Technology (BAT) and Best Environmental Practice (BEP) for Mitigating Three Noise Sources: Shipping, Seismic Airgun Surveys, and Pile Driving – CMS Technical Series No.46: <https://www.cms.int/en/publication/best-available-technology-bat-and-best-environmental-practice-bep-mitigating-three-noise>
- Guidelines for Planning Offshore Renewable Energy in the Baltic Sea Under the Amended Directive for Renewable Energy and the RePowerEU Plan. Summary Report 2023. WWF Baltic Ecoregion Programme / Coalition Clean Baltic. <https://www.ccb.se/publication/ccb-wwf-Offshore-Renewable-Energy-guidelines-summary-2023>