EFARO (European Fisheries and Aquaculture Research Organisations)

WEBINAR on Offshore Wind Farms and how we monitor their impact in Europe.

14th April 2023, 12.00 – 14.00 CET online

Background from EFARO:

The space for fisheries in European waters has been severely reduced over the past decades. Especially the development of Offshore Windfarms (OWF) has an impact on the ecosystem and, more directly, in taking up fishing grounds. The effects of windfarms on habitats and the carrying capacity of the ecosystem is as yet not fully known. It needs to be determined which system of monitoring should and could take place in order to assess these effects and determine whether these monitoring activities will be sufficient to assess the effects of OWFs in relation to MSFD and MSPD goals. In addition, it is noted that the monitoring that currently is taking place for example in the case of wind farms, gas platforms and mariculture, is not harmonised across Europe. This renders findings between different places to be incomparable. Moreover, present monitoring and impact studies happen only at the scale of single structure/system preventing an overall assessment of the cumulative impacts of all activities (e.g., windfarms, platforms, mariculture) at a regional/sea basin scale.

In order to attend to these issues, EFARO organised a dedicated Working Group Windfarms which had addressed the following issues:

In order to develop a proper impact assessment of the effects of wind farms, in terms of ecosystem impacts such as the carrying capacity of the system and effects on specific marine habitats in the short and long run, which elements should an appropriate monitoring programme entail? Which monitoring should and could take place?

- **How can we in Europe arrive at harmonising methodology/monitoring of wind farms (but also other infrastructures such as oil & gas platforms and mariculture infrastructure) in order to be able to compare data and conduct assessments at regional/sea basin scales?**
- **Are above measure sufficient to also ensure monitoring towards the policy goals of our waters (MSFD, MSPD)?**

Agenda:

- **Presentation of the findings and conclusions of the EFARO Working Group on the effects of Offshore Windfarms and how to measure them.**

Representative of EFARO: There is no methodology for monitoring offshore windfarms. Impacts of windfarms include underwater noise during construction and operational phase. Species like harbour porpoise are very sensitive to noise. There is also impact of electromagnetic fields. There is very little research on ecosystem-level impact. We should use a holistic approach and estimate the impact of OWF on basin level. We need innovative techniques for monitoring.

- **Reflections on the findings and conclusions by Eoin Mac-Aoidh, Acting Head of DGMARE Unit D3, CFP and Structural Support - Policy development and coordination**

DG Mare Eoin Mac-Aoidh: The issue is high on the political agenda. The role of MSP is growing in importance. A large number of wind farm projects are under way, especially in the North Sea and the Baltic. Therefore, there will be a period of intense consultations. To feed into these consultations, knowledge exchange is needed. Good governance is required to give just access to the sea. He outlined the role of the EU in MSP. There is the EU framework. There are concerns about knowledge gaps. The Commission is facilitating the OWF debate in the framework of MSP. We must be able to assess the cumulative impacts, taking into account how fast the wind power is expanding. The Commission and the European Parliament have launched several studies on the impacts of OWF[1]. The Commission will launch the Blue Forum in May 2023. This will be another opportunity to share knowledge on the impacts of OWF. The Commission is also working with the Member States on the issue of OWF. Multiple studies are pushing the agenda of OWF forward.

There was discussion on monitoring of the effects of OWF.
Peter Breckling: monitoring is conducted in Germany but there is no interpretation of the collected data. International exchange of views on specific data sets is needed to draw conclusions needed for the construction of OWF.
Andrew Gill (chair of ICES WG[2]): we have to think about innovative ways for data collection. It is about how the wind farms fit into the spatial use of the sea. We need transboundary and cross border work to assess their impact.
A participant said that acoustic telemetry has been proven to be a very useful monitoring tool to understand spatio-temporal movements of key species around windfarms and adjacent ecosystems. Most of this data is also publicly available via network databases, such as the Ocean Tracking Network or the European Tracking Network. Collective impact should be addressed.
The meeting agreed that ICES is the best platform for creating monitoring guidelines for OWF and impact models. The Member States should join forces and work together on the OWF impacts. Regional or sea-basin approach is the right one. There is a sense of urgency in this work due to the need to ensure energy security. Impacts should be mitigated as far as possible.

[1] PECH Committee study RESEARCH FOR PECH COMMITTEE - Impact of the use of offshore wind and other marine renewables on European fisheries (europa.eu)

[2] ICES Working Group on Offshore Wind Development and Fisheries