REPORT

Meeting: **SEADITO Workshop**
Parties: **stakeholders**
Date: **25 March 2025**
Location: **Zoom**
Chair: **Daniel Depellegrin, IHCantabria**
Rapporteur: **Kateryna Urbanovych**

1. Project overview & aims

SEADITO (Social-Ecological Analysis and Models for Digital Twin Ocean) is a Horizon funded initiative coordinated by Aalborg University, Denmark. Its central goal is to integrate social-ecological models to establish a decision-support platform for improving ecosystem based management across European marine regions. The project employs case studies in the Baltic Sea, North Sea, Mediterranean Sea, and a Pan-European context. The objective include the development of Digital Twin of the Ocean-compliant decision-support components, scalable social-ecological models, and educational materials for various stakeholders.

An essential part of SEADITO is the co-development of scenarios with experts and stakeholders. This includes the creation of explorative, predictive, and normative "what-if" scenarios designed to reflect case-specific realities. These will be developed through a series of invitational workshops and follow-up interviews. Stakeholders play a crucial role in this process, acknowledging that successful technical implementation of SEADITO requires contributions from scientists, policy makers, technology developers, and industry representatives alike.

2. Workshop objectives & participants

The aim of the workshop was to explore how the implementation of a set of EU policy actions shapes human activities, the availability of sea space, environmental pressures, social and ecosystem impacts, and the management of marine resources across European sea basins. Ultimately, the workshop aims to create links between knowledge and data in the case study areas by including more expert based inputs into the social-ecological models to provide a stronger science base for decision-making.

Workshop participants represented a broad range of sectors, including marine renewable energy, nature conservation, shipping industry & EU ports, fisheries and aquaculture sectors, marine biology and social sciences, advisory councils (represented by NSAC).

3. Workshop results

Participants were asked to contribute to the identification of drivers, impacts and responses to marine socio-ecological system on EU scale, as well as work together on a conceptual map covering different sea areas, aggregated for the European sea space.

Organizers asked workshop participants to focus on a number of sectorial policy actions needed for achieving sustainable and equitable seas:

1. Energy Targets established by the TEN E-Regulation are implemented
2. Biodiversity Strategy 2030 are implemented
3. Green Shipping and Ports (e.g. FuelEU) targets are implemented
4. Fishery & Aquaculture becomes more sustainable
5. Just Transition for coastal communities is progressively established

Based on these actions, stakeholders identified potential Blue Economy impacts and transformations that could result from these policy actions:

- Spatial squeeze due to competing sea uses (e.g., offshore renewable energy)
- Impacts on vulnerable and protected species
- Increased need for inclusive and diverse knowledge integration
- Cumulative environmental impacts
- Socio-economic pressures on coastal communities
- Habitat loss

Participants then brainstormed impacts on ecosystem, biodiversity and coastal communities of said pressures. The NSAC flagged the importance of considering displacement effects of closing certain areas to fishing, potentially impacting previously undisturbed ecosystems. On the other hand, closed areas also result in socio-economic consequences on coastal community depending on fishing must be considered.

In terms of actions and measures that need to be considered in response to possible impacts, the NSAC stressed the need of efficient stakeholder engagement when establishing closed or protected areas and in Marine Spatial Planning, as well as cross-sector collaboration through established platforms such as the Greater North Sea Basin Initiative, attempting to bring together diverse maritime users and create shared maps of sea use. All user groups should be treated equitably, ensuring that no single sector is required to adapt disproportionately due to overarching public interest considerations. The NSAC's advice on MSP and Stakeholder Engagement was shared with the project coordinators for further information.

4. Next steps of the project include

The SEADITO project will move forward with the following actions:

- Replication of workshops in other European sea basins using the same methodology

- Circulation of workshop outcomes and synthesis reports to project participants

- Development of a case study report, potentially focusing on Offshore Renewable Energy (ORE) or other emerging themes based on results