**BUSY AT SEA** – RECONSIDERING BLUE ECONOMY, ECOSYSTEM CONSERVATION AND CLIMATE PROTECTION?

- **MARINE SPATIAL PLANNING’S WORLDWIDE EMERGENCE**

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**MOTIVATION**

"No space left at sea" - this was the title of a recent media coverage of the ongoing marine spatial planning process for the North Sea and Baltic Sea. Whether it’s marine ecosystem reserves or industries that are part of the blue economy\(^\text{[iv]}\) such as shipping, fishing, aquaculture, pipelines and cables, and extensive offshore wind power facilities, all are vying for more space on the open water. Now factor in European and German climate and environmental protection goals and emerging technologies such as hydrogen generation, and it becomes difficult to prioritize and balance uses on an already burdened seascape. To what extent can a desired compromise eventually succeed?

With the ecosystem-based capacity of our seas at stake\(^\text{[iii]}\), all European states with access to the sea must complete marine spatial plans (MSPs) by 2021\(^\text{v}\). This puts environmental planning in an integral position as it finds itself in the middle of these efforts via strategic environmental assessment®.

**OUR TOPIC AND GOALS**

The aim of the study project is to critically analyse marine spatial planning approaches, worldwide:

1. **How does marine (environmental) planning work?**
2. **Who is involved? Which interests govern the seas?**
3. **To what extent should marine ecosystems be exploited?**

These planning and coordination processes are characterized by an often outstanding degree of transparency and documentation (Fig. left\(^\text{[vi]}\)). Not only are the well prepared planning and assessment documents globally available, but the statements of the participating stakeholders, including the minutes and outcomes of transboundary consultations, as well (Fig. right\(^\text{[v]}\)). Our department has also been involved in a scientific advisory board for the Federal Maritime Agency, guiding the amendment of Germany’s Marine Spatial Plan, providing us the unique opportunity to engage expert interview partners.
Through this contemporary case study, students will discuss and gain valuable insight into the global and dynamic utilization of the seas, while learning about and practicing basic environmental planning steps. Thus, important contents of environmental planning are made tangible. Among other things, we can have a closer and criteria-based look at the making of MSPs from Germany\textsuperscript{x}\textsuperscript{vi}, Poland\textsuperscript{xvi}, Portugal\textsuperscript{vi}, Scotland/UK, African countries, and Washington\textsuperscript{vii} and Massachusetts\textsuperscript{xii} in the United States.

**OUR MILESTONES**

**MILESTONE (1): HOW DOES MARINE (ENVIRONMENTAL) PLANNING WORK?**

UNESCO’s, *Step-by-step Approach for Marine Spatial Planning toward Ecosystem-based Management*\textsuperscript{xxi}, requires, among other things, establishing authority and organizing the MSP process, engaging stakeholders, analysing existing and future conditions, developing and implementing the plan and a decent follow-up process. At the same time, marine environments are characterized by challenging temporal and spatial dynamics, and require the transfer of land-based 2D- towards marine 3D-challenges, so-to-speak. What do, for example, current European drafts of marine spatial plans\textsuperscript{xii} \textsuperscript{xxiv} and its environmental reports offer to accomplish this mission? What can we learn, maybe in contrast, from seemingly more ambitiously ecosystem-based approaches such as the State of Washington MSP process? In any case, we do have comprehensive planning examples available for our analyses and our learning in this regard.

**MILESTONE (2): WHO IS INVOLVED? WHICH INTERESTS GOVERN THE SEAS?**

Around the world today, marine planning processes are culminating, as these rather novel activities have fallen into a globalized age and were, for example, highlighted by UNESCO\textsuperscript{xii}. Furthermore, in Europe it is required by law that all countries actually submit their marine spatial plans by 2021. Thus, we can work well with the reactions and comments of the involved stakeholders due to the transboundary (ESPOO) requirements concerning environmental assessments, among other things. Can marine nature conservation, climate protection by offshore wind turbines and grid integration or ‘green’ hydrogen generation complement traditional fishing, shipping and mining as well as tourism and recreation? Here, we will analyze the struggle of these stakeholders and their longing for ‘space on the sea’.

**MILESTONE (3): TO WHAT EXTENT SHOULD MARINE ECOSYSTEMS BE EXPLOITED?**

Numerous concepts propagate an ‘eco-system based’ approach for the oceans. Ultimately, this is based on the question of what even is the marine carrying capacity of human activities? Our terrestrial land use approaches should not simply be transferred to the environment of the oceans. There is the almost ethical question of to what extent we should exploit seascapes? For European seas we realize an ongoing struggle of two directives: The Maritime Spatial Planning Directive on the one hand, which is rather open-minded to ‘blue growth’ policies, and on the other hand, the Marine Strategy Framework Directive and its more prominent reference to ecosystem-oriented planning and management processes. Students may identify their own approach to discuss such divergences.

**ORGANIZATION**

The work will be structured and presented in plenary sessions and conducted in student sub-clusters. The results of our analysis will be compiled into a report (presumably a Wiki). We will have our virtual plenary meetings presumably on Friday mornings (to be finally determined in April) and will decide together, depending on then regulations (incl. vaccination progress etc.), how we wish to use the excursion week in June. Date and details of our first plenary meeting will be shared with the participating students in March. The project will be carried out as an online course again using mainly ISIS and Zoom with additional tools to be added where and when needed.

\textsuperscript{1} https://www.tagesspiegel.de/wirtschaft/fischerei-naturschutz-oder-offshore-windkraft-ber-um-den-platz-in-nord-und-ostsee-streit/26669710.html
\textsuperscript{2} e.g. https://journals.sagepub.com/doi/full/10.1177/1070496515580797

BSH 2021_Consultation meeting on the draft maritime spatial plan for the German EEZ in the North and Baltic Sea, 27 January; presentation

https://www.bsh.de/EN/TOPICS/Offshore/Maritime_spatial_planning/Revision//revision_node.html

https://polishmsp.eu/

https://www.psoem.pt/discussao_publica-2-2/

https://www.msp.wa.gov/learn/resources/

https://www.mass.gov/service-details/massachusets-ocean-management-plan


https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en

https://www.msp.wa.gov/learn/

http://msp.ioc-unesco.org/