

Until recently, maritime space has been treated as abundant and therefore not subject to competition between its users. Traditional sea users, such as fishermen, navigation, and navy have seldom experienced spatial conflicts because their actions have interfered with each other very rarely, i.e. at the limited sea areas that were intensively exploited. Thus the opportunity costs have not been assigned to the sea space. Sea conflicts were of nonspatial character. A typical example has been the constraints imposed on the development of coastal tourism by land economy, (e.g. nitrification has contributed to the blossoming of toxic algae and bacteria). Therefore, sea areas until recently have been of interest to oceanographers, ecologists, geographers or political scientists, but not to economists. Economists have researched the maritime economy but not the sea space.

This situation has changed only recently with the advent of new intensive forms of use of offshore areas for economic purposes: i.e. wind energy, mariculture, extraction of minerals from the seabed (mainly hydrocarbons), but also due to increased shipping and marine tourism.

Durable and non-transferable constructions (artificial islands) have begun to appear at sea, as it has been the case on land. They have had a synergistic and desynergetic impact on other users. The EU concept of Blue Growth foresees even further growth and more intensive use of marine areas for economic purposes. This will lead to new constructions and will accelerate spatial conflicts at sea.

Despite all those changes, the mechanisms of spatial development of marine areas have never been subjected to rigorous scientific analysis. A maritime location theory is missing. Sea space does not appear in the contemporary economic models explaining the location of human economic activity.

This project tries to bridge this gap. The project aims at a deepening of the understanding of the spatial development of marine areas, in particular an understanding of the mechanisms shaping this development. Systematic research in this area should gradually (step by step) enable the establishment of location theory of marine areas.

The different patterns of spatial development of terrestrial and sea areas are caused among others by separation of location of economic activity at sea and location of places of permanent residence of the stakeholders engaged in those activities. This leads to an entirely different meaning of such concepts as central places and/or functional regions on land and sea. In marine areas there is spatial separation of supply, demand, and decision-making (public choice) with regard to places affected by such decisions.

This is the reason why spatial development of marine areas must be analysed in the conjunction to the ongoing land processes.

Moreover, the spatial development of sea areas is much more influenced by international law in comparison to the land ones.

The analysis done in the project will be based on the models of mainstream economics (interactions between accessibility and economies of scale) but tools typical of public choice economics (surveying key stakeholders) and economic geography and oceanography (the valuation of individual non-portable elements / resources maritime space) will be used as well. Research will also be carried out to analyze the influence of the terrestrial economy on the demand for marine space.

Despite the preparation and implementation of numerous maritime spatial plans in various EU countries (and also outside the EU) coupled with background studies, so called stock-taking reports, the spatial economics of the sea space remains in its infancy. The project fills an important gap in this area and creates a starting point for opening a new research direction in spatial economics.

The analysis conducted under the auspices of this project will allow for a more rational spatial development of Polish sea areas, i.e. a more evidence-based maritime spatial policy.

The result of the project in relation to the Polish sea space will be as follows:

- maps showing the importance and structure of the maritime economy of coastal communities, and other municipalities contributing in substantial way to blue growth in Poland,
- maps of the economic value of Polish sea areas,
- identified and investigated mechanisms of spatial development of these areas with particular emphasis on the Polish ones,
- conclusions on shaping the future spatial development of Polish sea areas.

The Polish experience (analysis and conclusions from the project) will be presented at international scientific fora in order to trigger and initiate a broad scientific debate on the mechanisms of spatial development of sea areas in the EU. The results of this debate will be made public and published in form of a book. The book will serve as a contribution (initial input) to the creation of location theory of sea areas.

Therefore the key result of the project at an international scale will be a systematic comparison of the mechanisms shaping the spatial development of marine areas in selected countries and a catalog of universal principles and rules that govern this process. The Polish case will be compared with the international ones, and this comparative analysis will allow identification of universal mechanisms shaping development of marine space.