

PLAN4BLUE

newsletter

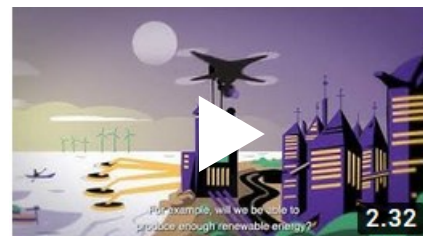
NEWSLETTER 3, JUNE 2019

MARITIME SPATIAL PLANNING FOR SUSTAINABLE BLUE ECONOMIES

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How the blue economy is moving forward in the Gulf of Finland and Archipelago Sea



Riitta Pöntynen, leader of WP1, University of Turku, Centre for Maritime Studies, riitta.pontynen@utu.fi

New scenarios support maritime spatial planning and enterprises

What are the future outlooks, threats and opportunities for 2050 with regards to energy production, maritime tourism, the maritime cluster, blue bioeconomy and subsea resources? The blue economy scenarios of the Plan4Blue project reveal potential and probable development paths for the Gulf of Finland and the Archipelago Sea.

The views of around 100 Finnish and Estonian experts and researchers have been drawn together to produce an animation and a range of infographics and reports. [The animation](#) introduces four different scenarios: "Unlimited growth", "Virtual reality", "Sustainability above all" and "Sustainability dilemma". The animation also provides an introduction to looking at the future as a range of alternative development paths. In the project, we also examined how each of the four alternative scenarios would affect the development of different industries.

The project focused particularly on those industries that were forecast to grow in the future based on the results of both expert work and financial analysis. At the same time, the drivers affecting them were also investigated.

[The infographics](#) introduce the assessment of different scenarios and their drivers within energy production, tourism, the maritime cluster, the blue bioeconomy and subsea resources. In addition to the drivers, the scenarios also highlight ‘black swans’ – factors that can suddenly change the course of development.

More detailed information on how the scenarios would affect different sectors can also be found in the scenario report ([scenario report, pdf, 2 MB](#)) and other more detailed reports.

Assessments and infographics for different industry scenarios



Growth is forecasted for renewable energy sources in general, and solar energy and wind power in particular. ([Infographic, pdf](#))



Growth is anticipated especially in the cleantech sector and in maritime transport. ([Infographic, pdf](#))



Aquaculture and fish farming in particular are expected to increase. ([Infographic, pdf](#))



Strong growth in different forms of tourism: nature, city and adventure tourism. Guest marinas and services for recreational boats are increasing, especially in Estonia. ([Infographic, pdf](#))

Scenario work relies on extensive expertise

Riitta Pöntynen, leader of WP1, University of Turku, Centre for Maritime Studies, riitta.pontynen@utu.fi

"It has been important for scenario work that we have been able to work with the information users, such as planners preparing maritime spatial plans, and receive from them direct feedback on our work", Head of Scenario Work Riitta Pöntynen is satisfied to report.

The essential aspects for preparing future scenarios are interactivity between researchers and experts and the gradual increasing of scenario specificity during the process. The aim has been to offer and develop various tools and information for the needs of maritime spatial planning and to encourage envisioning of different future development paths. For this reason, several different methods and working methods have been used in the scenario work, ranging from traditional questionnaires to map work.

In the process of preparing scenarios, experts from various sectors were involved in a multifaceted way. Two different surveys were sent to members of the expert panel (Delphi), and they had the opportunity to change or further clarify their opinions after the first round of responses. In addition to the surveys, a wide range of experts and stakeholders from different fields participated in two future-focused workshops in Helsinki and Tallinn.

Through the scenario process of the Plan4Blue project, information on maritime spatial planning increased within the various sectors of the blue economy. Those participating in the work were mostly representatives of different sectoral unions and associations. The results were further complemented by interviews with company experts, through which a broad range of business perspectives were added to the mix. At the same time, it was also possible to assess previous results from a business perspective.

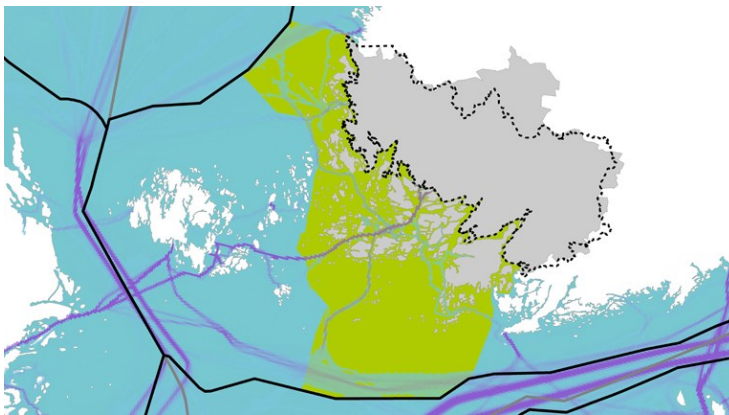
"Another rewarding aspect has been the enthusiastic participation of experts from different fields in the work. It is great that the participants have got involved in envisioning what the world will look like in 2050", Riitta Pöntynen adds.

Learn more about the scenarios and how they were formed: [Alternative scenarios for the blue economy in the Gulf of Finland and the Archipelago Sea](#)

New guide for spatial data analysis in Maritime Spatial Planning

Harri Tolvanen, leader of WP3, and postdoctoral researcher Tua Nylén, University of Turku, firstname.surname@utu.fi

Plan4Blue released a new guide for cross-border spatial data analysis in Maritime Spatial Planning. It aims at improving the efficiency and transparency of spatial data analysis in MSP processes. The target groups of the guide are regional planners and spatial data officers involved in national and cross-border Maritime Spatial Planning. The guide is an open access publication and can be downloaded for free.



The guide aims at helping the regional planner understand and evaluate maps and other outputs of spatial data analysis. In addition, it seeks to assist the GIS specialist in understanding Maritime Spatial Planning and designing spatial data analysis workflows in a goal-oriented way. The content of the guide arises from literature and experiences of the international Plan4Blue project.

Spatial information and maps are one of the cornerstones of Maritime Spatial Planning. They are present at every step of the planning process and maps play an important role in involving stakeholders and the public in the process. Successful evaluation, collection, management, analysis and visualisation of spatial information are the key for making evidence-based planning decisions.

Member states of the EU plan the use of sea space within their own territories. However, spatial data from the other side of administrative borders is needed, since the planning processes require awareness of human uses and the nature beyond borders. In addition, spatial information of economic, cultural and nature aspects needs to be fitted together in the planning process. Compared to land use planning, spatial data utilisation in Maritime Spatial Planning faces many additional challenges. Therefore, the different practices in the management of spatial information across geographical and thematic boundaries must be carefully dealt with.

The guide has four parts that MSP processes usually include:

- I. Set stage for spatial data analysis in MSP (Steps 1-4)
- II. Collect and manage spatial data (Steps 5-8)

- III. Analyse spatial data – examine interactions (Steps 9-11)
- IV. Visualise MSP on maps (Steps 12-14)

[Guide for cross-border spatial data analysis in Maritime Spatial Planning \(pdf, 2 MB\)](#). Nylén T, Tolvanen H, Erkkilä-Välimäki A & Roose M (2019). Guide for cross-border spatial data analysis in Maritime Spatial Planning. Publications of the Department of Geography and Geology of University of Turku 12. University of Turku, Turku.

Environmental management strategy for MSP

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The multiple competing uses of marine and coastal areas have resulted in a rapid increase of maritime spatial planning (MSP) initiatives to safeguard sustainable use of marine resources as well as to mitigate cross-sectoral and transboundary conflicts over the use of sea space. The MSP is defined as a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process.

The marine ecosystems are increasingly threatened by the cumulative effects of multiple human pressures. Assessments of the cumulative impacts are needed to inform environmental policy and guide ecosystem-based management. Cumulative impacts are generated by complex web of effects, but a risk-based approach decreases complexity and allows for the transparent treatment of uncertainty and streamlines the uptake of scientific outcomes in planning and decision-making. Furthermore, in a course of MSP the potential planning options will have to abide to legislation and regulatory requirements for the planning sea area provided that there are regional, national or international agreements, which will enable and/or force the environmental management measures to be performed.

The aim of the study was to outline the “Environmental management strategy for MSP” with an aim to provide general guidance to planners, decision makers and stakeholders in improving the competitiveness and effectiveness of maritime planning activities existing within the national marine jurisdiction while at the same time maintaining and improving marine ecosystems’ resilience, conserving biodiversity and restoring degraded habitats to achieve the MSP related environmental policy objectives.

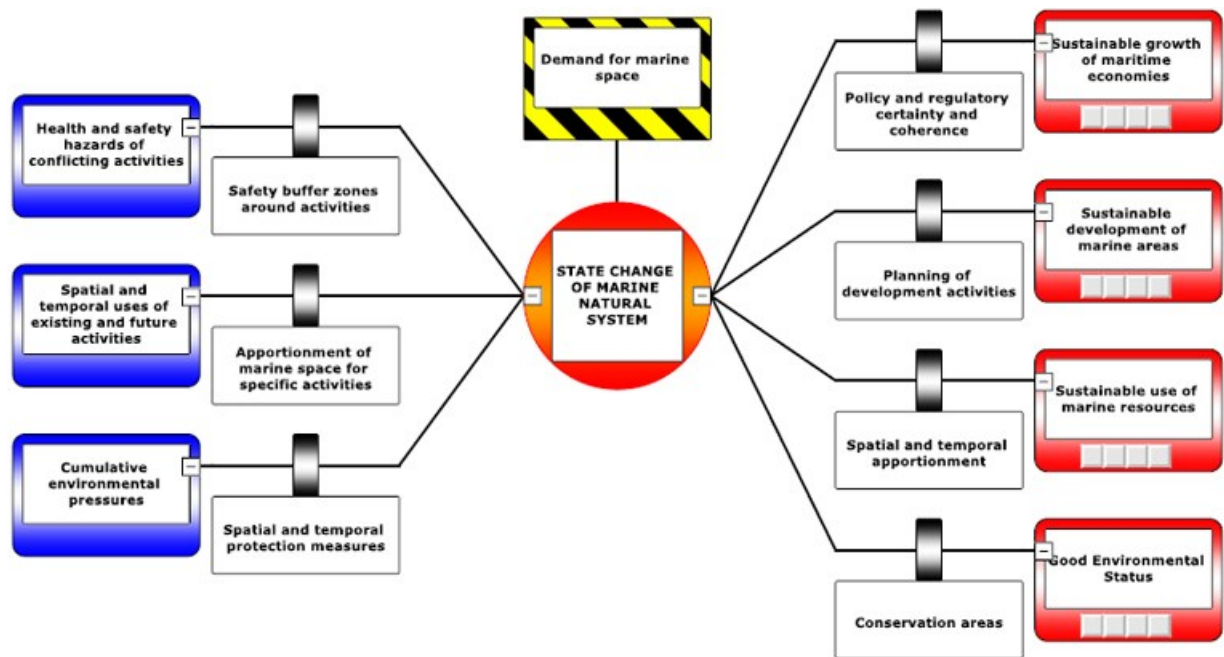


Figure. Bowtie diagrammatic representation of the Maritime Spatial Planning related prevention and mitigation management measures to achieve the environmental, economic and social sustainability objectives (modified from Cormier et al. 2015).

[Environmental management strategy for maritime spatial planning](#) (pdf, 1 Mb, June 2019)

Plan4Blue final conference 4-5 June 2019

The final conference gathered a broad range of actors to discuss the findings of Plan4Blue and the future of MSP collaboration in the Gulf of Finland and Archipelago Sea areas.

[Read more](#)

[Read all Plan4Blue newsletters – Last one is coming in autumn 2019!](#)