

# Monitoring and evaluation model for maritime spatial planning

October 2020

Jussi Airaksinen, Tuomas Raivio, Mari Saario,  
Fanny Suominen, Anu Vaahtera  
Gaia Consulting

Hanna Hannula, Elisa Lähde, Tuuli Rantala  
WSP Finland

MARITIME SPATIAL PLANNING



EUROPEAN MARITIME  
AND FISHERIES FUND



EUROPEAN MARITIME AND FISHERIES FUND  
OPERATIONAL PROGRAMME  
FOR FINLAND  
2014-2020

*gaia* 

**wsp**

# Content

<b>1. Introduction</b>	<b>3</b>
<b>2. Goals of the monitoring and evaluation model</b>	<b>4</b>
<b>3. Description of the method of the monitoring and evaluation model</b>	<b>4</b>
<b>4. Targets set for monitoring and evaluation</b>	<b>8</b>
<b>5. Guidance for implementation of monitoring and evaluation</b>	<b>9</b>

# 1. Introduction

Monitoring and assessing the impact of the implementation of maritime spatial planning is essential in order to verify the effectiveness of the measures taken and to monitor changes in environmental conditions and in the use of the marine area, and to assess whether the plans have been successful.

The maritime spatial planning process can be supported with quantitative and qualitative evaluations.

- Quantitative evaluations typically provide results that can be compared over time. Evaluation requires that maritime spatial planning targets are integrated into the appropriate indicators in order to measure and assess the effectiveness of each measure over time. Quantitative evaluation requires that sufficiently high-quality and harmonious numerical data is available.
- Qualitative evaluations are based either on a self-evaluation of progress or on actual changes that can be verified externally. These can be identified through various checklists, yes/no questions or surveys based on the involvement of experts and stakeholders on whether the operating environment has changed in the right direction.

- In maritime spatial planning, the goal of evaluation is to measure key elements and results of the planning process, which can ideally be quantified as quantitative indicators.

- Qualitative evaluation may replace or supplement quantitative evaluation where indicators are not available or where, for example, they are not relevant to the stakeholders' views. Quantitative evaluation is therefore not unambiguously better than qualitative evaluation. The nature of maritime spatial planning as a comprehensive process that emphasises cooperation is also a basis for collecting the views of stakeholders.

This document describes the monitoring and evaluation model of the Finnish maritime spatial plan monitoring and evaluation model, which has been prepared in accordance with the EU's MSP Platform guidelines. As part of the model, defined goals and indicators have been structured according to the goals defined for maritime spatial planning in the Land Use and Building Act (132/1999). Finally, concrete recommendations and guidelines for the implementation of monitoring and evaluation have been defined in the context of Finnish maritime spatial planning.

## 2. GOALS OF THE MONITORING AND EVALUATION MODEL

The monitoring and evaluation model allows the authorities to measure and monitor the achievement of the goals of maritime spatial planning and, if necessary, to adjust the goals when required by changes in the operating environment, for example. The goals are as follows:

A. Identify the actors responsible for the collection, analysis and reporting of the data to be monitored.

B. Provide a methodological description of the chosen indicators: definitions of indicators, data sources, baseline, target value, limitations in relation to goals.

C. Specify the frequency of data collection and reporting.

D. Identify typical users of indicators, such as maritime spatial planning authorities; other national/regional authorities; stakeholders from different sectors; the wider public, including NGOs.

## 3. DESCRIPTION OF THE METHOD OF THE MONITORING AND EVALUATION MODEL

Starting points, goals, measures, indicators, responsibilities, timetable and final output are defined as part of the monitoring and evaluation model (Figure 1). The following uses and sectors of maritime spatial planning are taken into account in the development of the model: conservation and management of marine nature,

offshore wind power, maritime logistics, tourism and recreation, fisheries and aquaculture, maritime industry, blue biotechnology, extractive industries, cultural heritage and national defence.



Figure 1. Development process of the monitoring and evaluation model

In order for the authorities to be able to monitor the implementation, impact and effectiveness of the maritime spatial plan and to develop appropriate indicators, clear targets need to be formulated. Marine spatial planning targets should comply with SMART (Specific – Measurable – Achievable – Relevant – Time-bound)

criteria: the targets should be concrete, measurable, achievable within a time frame, meet identified needs, and be time-bound. The targets may also be at different levels (see Figure 2).

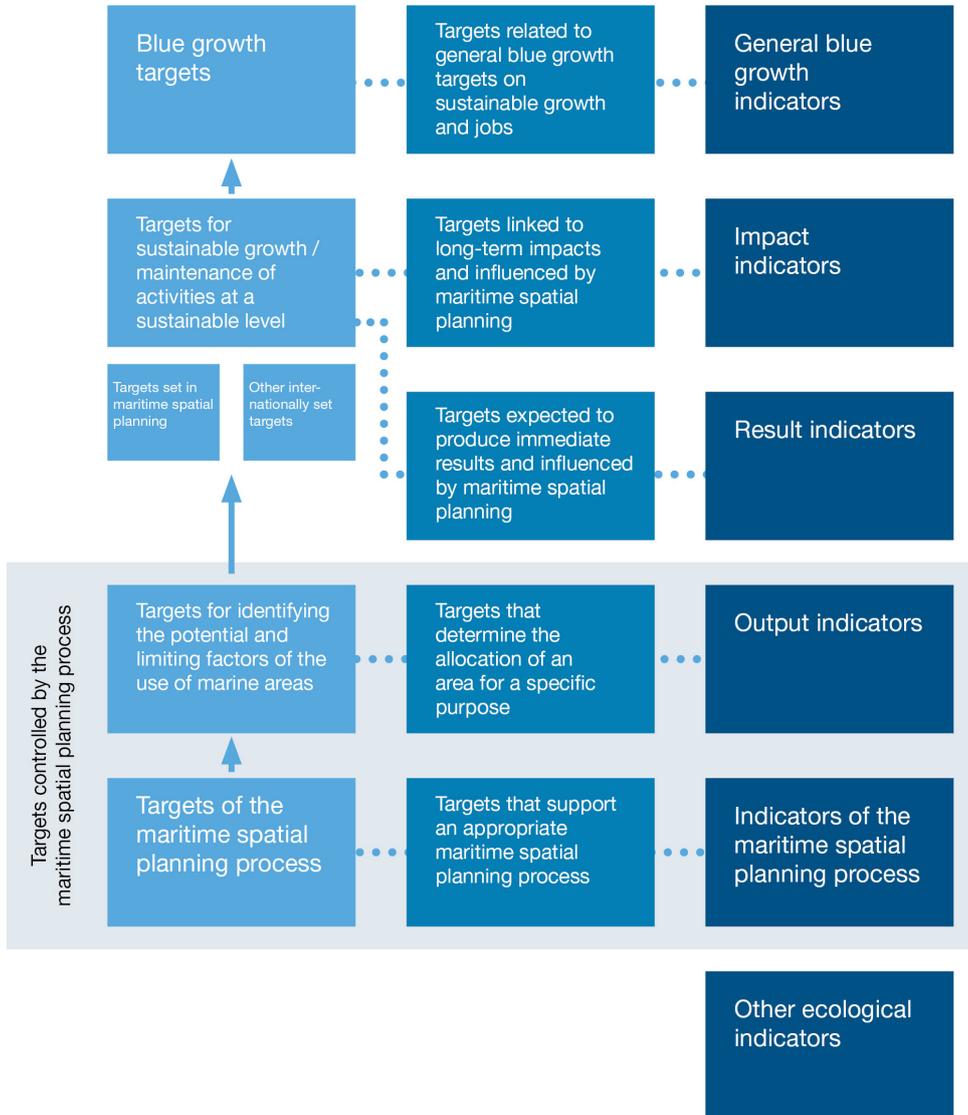


Figure 2. Definition of the targets and indicators of the monitoring and evaluation model

Maritime spatial planning authorities control only the process and operational targets, while the maritime spatial plan and external factors influence the other levels. High-level goals should be taken into account in planning processes, however, as they are often the result of political decision-making that has an impact on maritime spatial planning. The following have been taken into consideration in planning the targets:

- Blue growth targets, national strategies/policies/action plans and targets set in regional and local strategies/policies/action plans

- Targets for different sectors of the blue economy
- Environmental/biodiversity goals/goals for maintaining and promoting the good environmental status of marine waters.
- Targets of the maritime spatial planning process
- Fulfilment of SMART criteria
- Engaging stakeholders

When formulated, these targets can be combined with indicators measuring their attainment at all levels (see Figure 3).

- General blue-growth indicators (e.g. number of jobs, added value and greenhouse gas emissions); use as context indicators
- Impact indicators monitor the development of blue economy sectors
- Result indicators are relevant to the different sectors

of the blue economy and reflect socio-economic and ecological aspects

- Output indicators measure progress towards operational goals and should be linked to operational ecological targets and take land-sea interaction into account
- Indicators of the maritime spatial planning process: quantitative (e.g. number of consultations) or qualitative

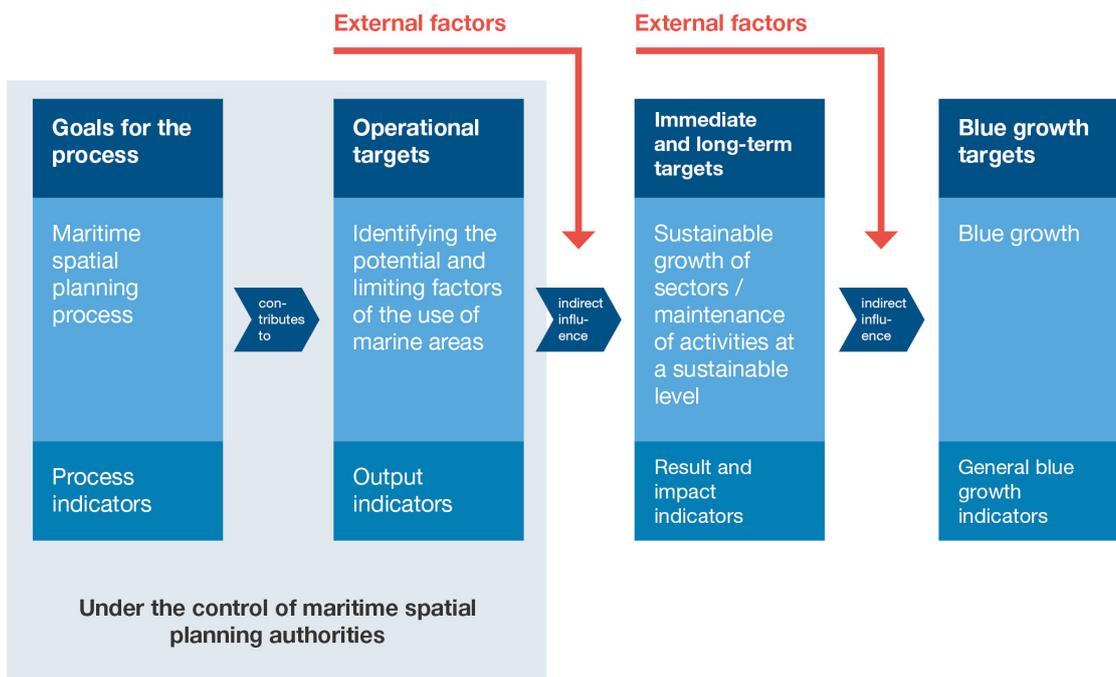


Figure 3. Impact path of maritime spatial planning

Both during and after the preparation of the maritime spatial plans, progress towards the targets will be monitored with the specified indicators. The indicators take into account the quality criteria of the EU's MSP Platform.

The aim is to provide qualitative and quantitative information to help actors involved in public activities communicate, negotiate and make decisions.

The following quality criteria should be used in the selection of indicators:

- the so-called SMART criteria: the indicators should be concrete, measurable, achievable within the set time limit, relevant to the targets and time-limited (i.e. there

should be a clear indication of when the defined targets are expected to be achieved);

- cost-effectiveness: data acquisition costs should be justified and in proportion to the resources available for monitoring;
- normativeness/direction: when maritime spatial planning is successful, the indicator must show a clear direction (increasing or decreasing);
- engagement of stakeholders in the planning of indicator systems; and
- simplicity: indicators should be as simple as possible and easy to understand.

The process of developing the indicators includes the definition of the baselines and related target values and the data sources provided, including data coverage and gap analysis. Targets are likely to be redefined depending on the progress made towards the goals and targets, which would also require a revision of the indicators.

Once the targets and indicators have been defined, the functioning of the planned processes, outputs, results and impacts can all be monitored. The indicators contained in the plans should be monitored throughout the implementation of the plans and information on any changes should be communicated to the relevant stakeholders.

Systematic data collection from selected indicators provides information to stakeholders on the extent to which progress has been made towards attaining the

targets. These indicators provide the basis for measuring and determining the performance of the maritime spatial planning process.

Finally, the monitoring and evaluation model is described in the maritime spatial planning indicator document. The description covers the development process of the indicator, the context of the indicator (e.g. strategic documents), the overall structure of the indicator, the arrangements for adjusting the indicator system, the main assumptions and external factors affecting the achievement of target values, and the means of communication for the achievement of target values.

The results of monitoring and evaluation should be reported to the users of the indicators and may lead to changes in the index systems and the redefinition of targets (see Figure 4).

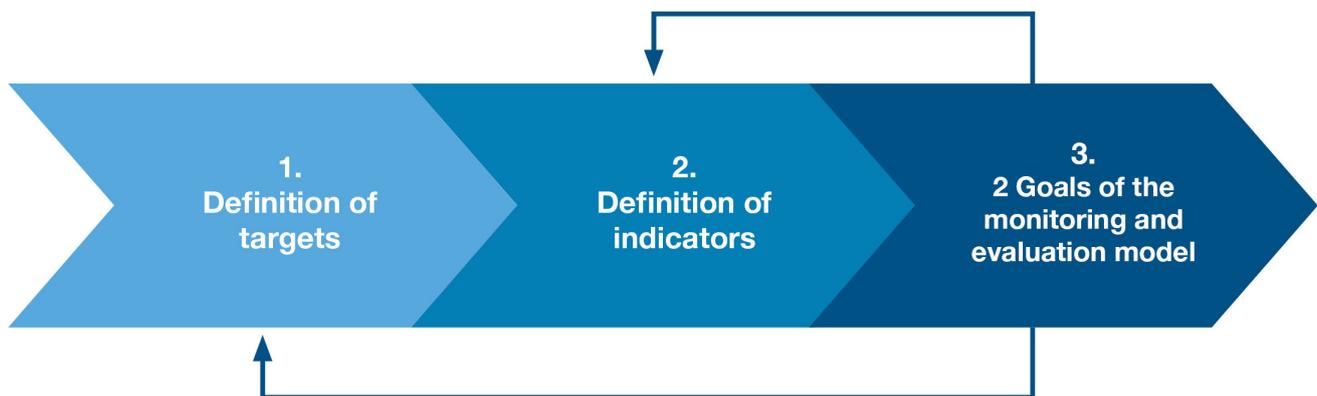


Figure 4. Monitoring and evaluation feedback cycle as part of the model

The baselines, goals and measures will be determined on the basis of the impact assessment drawn up above.

The indicators will be defined in relation to goals and measures for each sector of maritime spatial planning. The targets and indicators will be reviewed in relation to the criteria set by the EU's MSP Platform. As part of the definition of indicators, the parties responsible for the collection, analysis and reporting of indicator data will also be defined. In addition, a methodological description of the selected indicators will be produced. The methodological description of the selected indicators should include at least: definitions of the indicators; a detailed description of data sources; methods of

calculating baseline and target values; limitations of indicators in relation to targets; frequency of data collection; frequency of reporting.

Also, the typical users of indicators, such as maritime spatial planning authorities; other national/regional authorities; stakeholders from different sectors; the wider public, including NGOs, will be identified. The results of monitoring and evaluation should always be reported to the users of the indicators and may lead to changes in the indicator systems and the redefinition of targets.

# 4. Targets set for the monitoring and evaluation

As part of the model, defined targets and indicators have been structured according to the goals defined for maritime spatial planning in the Land Use and Building Act (132/1999). These three main goals are:

- promoting sustainable development and growth of the different uses of the marine region;
- promoting the sustainable use of natural resources; and
- contributing to the achievement of a good environmental status of marine waters.

In addition to these, key goals include:

- coordinating the needs of the different uses the marine region;
- taking the characteristics of the marine region into consideration;
- taking land-sea interaction into consideration; and
- taking national defence needs into consideration.

According to the SMART (Specific – Measurable – Achievable – Relevant – Time-bound) criteria, goals should be concrete, measurable, achievable within the time frame, meet identified needs and time-bound in order to present a trend.

The first five goals serve as the basis for the classification of targets. The interaction between land and sea and defence needs are included in the goals defined for different sectors, for example.

In addition to the main goals which provide the basis for the classification of targets, the target levels are defined as follows:

- Targets of the maritime spatial planning process
- targets for identifying the potential and limiting factors in the use of marine areas;
- targets set in maritime spatial planning for sustainable sector growth/sustainable operation; and

- other nationally defined goals for sustainable growth/maintenance of sectors at a sustainable level.

- Blue growth targets

The goals of the maritime spatial planning process have been derived from the principles of the ecosystem approach. The European MSP Platform's guidelines have been used to define the sub-targets. In addition, the zoning and differences between planning areas defined in the maritime spatial plan are taken into account.

The goals for identifying the potential and limiting factors in the use of marine areas have been defined, as a rule, on the basis of the document Maritime spatial planning zones and markings. These goals determine the allocation of an area for a specific purpose. More detailed planning is required to place activities in potential areas. When planning and developing all activities, it is important to take into account the goal of good environmental status of maritime waters.

The targets set in the maritime spatial planning work for the sustainable growth of sectors/the maintenance of activity at a sustainable level are based on the goals defined in the sectoral roadmap for maritime spatial planning vision work. In addition to sectors, the goals are classified as economic and ecological goals and socio-cultural objectives.

Other nationally defined goals for sustainable sector growth / the maintenance of activities at a sustainable level are based on national policy definitions and strategies, EU directives or national plans implementing them, where relevant.

The targets for blue growth are largely derived from EU level strategies (e.g. the strategy for blue growth, the Baltic Sea strategy) and, where relevant, from national strategies.

The goals are listed in a separate Excel file. Some of these goals have a specific goal and, if necessary, several targets. Some of the goals are also mutually similar, which means they can be linked to each other. The indicators identified for monitoring the targets are defined on a separate tab and the key indicators are linked to the target.

## 5. GUIDANCE FOR IMPLEMENTATION OF MONITORING AND EVALUATION

The achievement of the targets should be monitored both in the planning process and in the implementation of the completed plan. Once the targets and indicators have been defined, the functioning of the planned processes, outputs, results and impacts can all be monitored. It must be possible to modify and change targets, which also has an impact on the indicators used.

Systematic data collection from selected indicators provides information to stakeholders on the extent to which progress has been made towards attaining the

targets. These indicators provide the basis for measuring and determining the performance of the maritime spatial planning process.

The results of monitoring and evaluation should always be reported to the users of the indicators and may lead to changes in the indicator systems and the redefinition of targets.