RAHANDUSMINISTEERIUM

HENDRIKSON & KO

INITIAL OUTLINE FOR THE ESTONIAN MARITIME SPATIAL PLAN

AND THE

MEMORANDUM OF INTENTION TO CONDUCT IMPACT ASSESSMENT

Maritime spatial planning is a tool **for the long-term planning of the use of the sea** in order to ensure **economic benefits** resulting from the exploitation of marine resources as well as the value of the sea and coastal areas as **socially and culturally** important areas. Upon maritime spatial planning, it has to be kept in mind that any human activity is based on the achievement or maintenance of the **good status of marine environment.**

Tallinn
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INTRODUCTION

This document constitutes the initial outline for the Estonian maritime spatial plan (MSP) and the memorandum of intention to conduct impact assessment, including strategic environmental assessment (SEA) initiated by the order of the Government of the Republic on 25 May 2017. The purpose of the outline is to create a common understanding between the authority that organizes the preparation of the plan and the participants in the planning process on *why* the plan is prepared and *how* it is done.

The purpose of MSP is the long-term planning of the use of the Estonian marine space (Figure 1), taking equally into account the social, economic, cultural and environmental impacts and needs.

The initial outline describes the *purpose* of the preparation of the maritime spatial plan, identifies the main issues to be solved and specifies the *planning tasks* to be carried out. It describes the *level of detail* of the plan, the *process* for the preparation of the plan (involvement on stakeholders, timeline of the process), explains the background of maritime spatial planning and activities that preceded the national planning process in Estonia. The initial outline sets out the *detailed objectives* and *functions* for the preparation of MSP and determines the *organisational aspects*, including the *participation scheme*. The memorandum of intention to conduct impact assessment, including SEA describes which activities in MSP may have a significant negative impact, what is the nature of this impact and how will this impact be evaluated in the assessment process.

The initial outline for MSP and the memorandum of intention to conduct impact assessment, including SEA have been prepared after the initiation of the plan, in cooperation of the Planning Department of Estonian Ministry of Finance and the experts of Hendrikson&Ko Ltd.

The latest information on the planning process and the related documents are constantly available on the website of the Ministry of Finance at www.rahandusministeerium.ee/planeeringud and on the planning portal https://mereala.hendrikson.ee.

1. THE PURPOSE OF MARITIME SPATIAL PLANNING

Maritime spatial planning is a tool **for the long-term planning of the use of the sea**, which balances the social, economic, cultural and environmental interests and needs. Maritime spatial planning enables to determine where and under what conditions the implementation of different human activities in the marine area is most reasonable in order to ensure **the economic benefits** resulting from the exploitation of marine resources as well as the value of the sea and coastal areas **as socially and culturally** important areas, keeping in mind that any human activity has to be based on the achievement or maintenance of the **good status of marine environment**.

Today, the marine area surrounding Estonia is used for many different purposes: the transport of goods and passengers, fishing, recreation, etc. In addition, in recent years there has been an increase of interest in a number of new activities in marine area, particularly in energy production. At the same time, we must keep in mind that all this takes place in the marine environment which has a limited tolerance level.

The *values and principles* that underpin the use of Estonian marine area as a public resource are currently not agreed upon. Today, maritime activities are generally subject to sectoral regulations. Thus, decisions to allow the use of marine area are also made sectorally (e.g. issuing building permits, planning of new fairways or relocating the existing ones, forming of dumping areas etc.). Such approach does not ensure a comprehensive handling of sea as a natural and economic environment. Sectoral decisions do not ensure that the current or future needs of other sectors are taken sufficiently into account. During the sectoral decision-making process, the short-term and long-term *cumulative impact* to the environment (nature, economy, society, culture) is generally not assessed. MSP carries the role of integrating different sectors.

The purpose of maritime spatial planning is to agree upon the *principles for the use of Estonian marine area in the long term*, in order to promote the *maritime economy* and contribute to the achievement and maintenance of the *good environmental status.* The plan determines on where and under what conditions certain activities are carried out. During the preparation of MSP, *synergy* between the activities already happening in the marine area and the planned activities will be addressed. Also, the impact of these activities on the marine environment and economy as well as their socio-cultural impacts shall be assessed. In the future, the adopted MSP serves as a *basis for decision-making processes* for ministries and other authorities to allow different uses of the marine area. It will also serve as a guide for the activities of businesses, investors, local authorities and coastal communities. MSP must be taken into account in the preparation of subsequent plans, in admission of permits for different uses and in composing of national and local government's strategic development documents, including comprehensive plans.

Maritime spatial planning should become the basis for directing the maritime economic activities as well as other sectoral maritime activities in order to avoid conflicts between

different sectors and to ensure the **sustainable use of marine areas** and the **preservation of marine environment**.[1]

Estonian MSP is built on the Directive 2014/89/EU of the European Parliament and of the Council establishing a framework for maritime spatial planning. According to the directive, Member States must establish their maritime plans by March 2021 and follow a range of minimum requirements when establishing those plans. The directive promotes for the Member States to consider economic, social and environmental aspects to support sustainable development and growth while applying the ecosystem approach. Achieving and preserving the good status of marine environment is the most important goal of the directive.

According to the vision of the national spatial plan "Estonia 2030+", *Estonia will be open to the sea* by 2030. The travel, cargo and small harbours network, which is one of the key factors of the country's international competitiveness, is well functioning and well connected with other infrastructures. *An efficient and sustainable use of marine areas is important for the country*. With the help of appropriate plans, a reasonable balance has been achieved between recreational activities, tourism, protection of water bodies, national defence and economic activities. Water bodies and beaches that illustrate the Estonian landscape and highlight the special features of the space both in the cities and in the countryside are in active and sustainable public use.

According to the national development plan "Estonian Maritime Policy 2012-2020", Estonian maritime sector is an attractive and *sustainable* economic sector with high added value, which ensures the *preservation of marine environment* and contributes to the *development* of coastal environment and way of life. The impact on the marine environment has decreased, navigational safety has improved and the number of accidents has decreased. Due to the improvement of infrastructure and the development of small enterprises, coastal areas and islands have turned into an attractive living environment. Maritime traditions and cultural heritage have survived and they are actively promoted.

According to the objectives set in the national spatial plan "Estonia 2030+" and in the development plan "Estonian Maritime Policy 2012-2020", the aim of MSP is to determine the **long-term conditions for the use of Estonian marine area**, in order to guide human uses of sea and avoid conflicts between different sectors, **make the best use of the potential of Estonia's marine resources** and **achieve and preserve the good status of the marine environment**.

1.1 Planning area

Estonian marine area is situated in the Northeast part of the Baltic Sea and contains of the Gulf of Finland, Gulf of Riga, the open sea and Väinameri, situated in the West Estonian archipelago. Estonian marine area is divided into three zones: internal sea, territorial sea and exclusive economic zone (Figure 1).

Internal sea is the maritime area which lies between the baseline of the territorial sea and the shoreline. The baseline of the territorial sea is an imaginary line which connects the points

[1] National development plan „Estonian Maritime Policy 2012-2020".

on land, islands, islets, rock formations and single rocks above water level that are the furthest from the shoreline.

Territorial sea the sea area which is adjacent to the internal sea and the external boundary. The breadth of the territorial sea is 12 nautical miles. The territorial sea is regarded as the sovereign territory of Estonia. Estonian territorial seas average depth is approx. 30 meters. Territorial sea together with the internal sea are territorial waters.

Exclusive Economic Zone (EEZ) is the sea area outside the territorial sea which is adjacent to the latter, and its external boundary is determined with the approval of neighbouring states. The rights and jurisdiction within the EEZ are regulated in the Exclusive Economic Zone Act and the international law of the sea (UNCLOS). The sovereign rights of the state in its exclusive economic zone are the rights of exploring, exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed, and of the seabed and the subsoil beneath it, and the right to other activities for the exploration and exploitation of the exclusive economic zone. In the exclusive economic zone, every state has the freedom of sea and air traffic, installation of submarine cables and pipelines and other use of the sea provided that the provisions of the Exclusive Economic Zone Act and the generally recognized rules of international law are adhered to. The average depth of the Estonian EEZ is approx. 81 meters. The differences in planning the EEZ are presented in the sectoral sub-objectives chapter (see chapter 1.2.).

The overall size of Estonian marine area is approx. 36 500 km², of which the EEZ is 11 300 km². The length of the shoreline of the mainland is 1242 kilometres, together with the islands it amounts to 3793 kilometres.

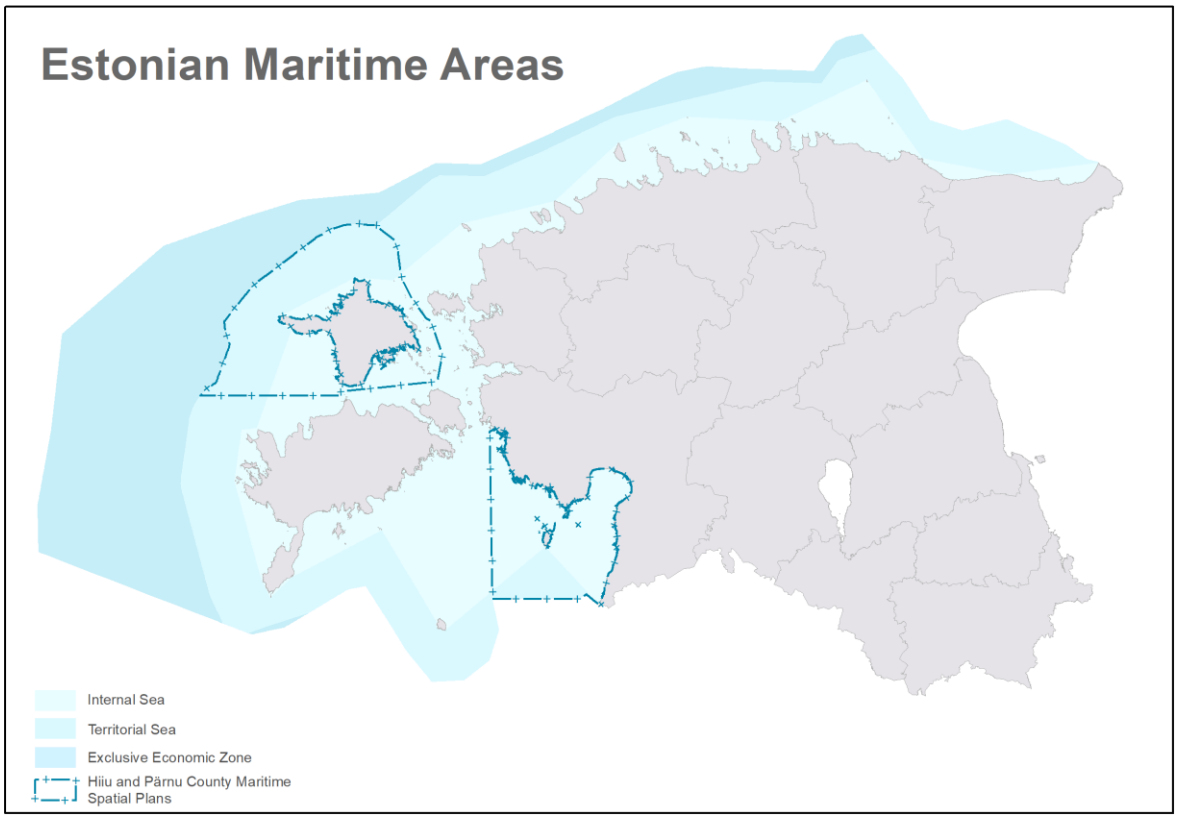

Figure 1. Estonian marine space

Coastal areas are included in the MSP process through *land-sea interactions*, taking into consideration the activities that directly influence terrestrial areas or are influenced by activities on the coast, such as ports, cables etc. Coastal area is not considered as a specific coastal zone in MSP, but rather through necessity. MSP will give guidance on how to develop coastal areas through comprehensive and detailed plans at the local level.

1.2 Sectoral sub-objectives

The objective of MSP is based on the sectoral sub-objectives, in order to *promote the economic potential of Estonian maritime area and to preserve the marine environment* through efficient use of space integrating different sectors. The objectives of MSP are derived from sectoral development plans, strategies, EU directives and other documents guiding the development of maritime area. The objective of MSP is to implement the spatial needs of various sectors and to balance the sectors in the maritime area.

Topics handled in the preparation of MSP result from the Planning Act. Functions of MSP mentioned in section 2, Article 14 of the Planning Act establish ways on how to deal with different sectors and achieve sectoral sub-objectives in the planning process. Section 2, Article 14 of the Planning Act brings out the following tasks for MSP:

1. to determine the principles and directions of the balanced spatial development of sea area;
2. to determine the measures required for the protection of marine environment;
3. to take into account, in a spatial plan, the location of waterways and, where necessary, to make recommendations for rerouting waterways or for planning new waterways;
4. to determine the location of harbours;
5. to determine measures to ensure the functioning of fisheries;
6. to take into account, in a spatial plan, the protected areas and the conditions for their use;
7. to determine the location and general building conditions of construction works that do not have a permanent connection to the shore;
8. to identify sea areas that serve national defence purposes and to define the conditions for the use;
9. to ensure measures required in order to commence the exploitation of mineral resources and to determine the land use conditions concerning areas influenced by the mining of mineral resources;
10. to define recreation areas and to determine the conditions of their use;
11. to determine the measures required to ensure the preservation of heritage values;
12. to identify suitable areas for constructing energy, gas and communication networks;
13. to perform other functions related to the functions referred to in this subsection.

The objectives of the maritime spatial plan and the tasks to be fulfilled are specified in the course of preparing MSP in cooperation with various authorities and stakeholders.

1.2.1 MARINE ENVIRONMENT

MSP must create prerequisites for the sustainable use of marine natural resources, provided that **the good condition of the marine environment has been achieved and preserved**. Taking the marine environment as a precondition is the only way to ensure the development of sustainable maritime economy.

Pursuant to Article 14, section 2, subsection 2 of the Planning Act, the maritime spatial plan must determine the measures required for the protection of marine environment.

In order to meet the objective and to fulfil this task, MSP must:

- analyse the spatial coherence of the existing protected areas in the context of the Estonian coastal sea and the entire Baltic Sea in order to ensure the operation of sustainable marine corridors (*blue corridors*), based on current environmental conditions and increased pressures, including climate change, and, if appropriate, propose or foresee measures for the better functioning of the protected marine areas network;
- analyse, which activities of the blue economy (for example the cultivation of shellfish and/or algae) have the perspective to increase the capacity of cleaning the marine environment and in which spatial areas these activities should be planned for;
- analyse, which marine areas have significant migratory corridors and nutrition and stopping areas for birds and bats. If necessary, the marine areas have to be reserved for the migratory corridors or nutrition and stopping areas of birds, or the measures that ensure the maintenance of bird diversity have to be provided with regard to the planned competing activities.
- analyse, which marine areas have significant nutrition areas and habitats of marine mammals. If necessary, the marine areas have to be reserved for the nutrition areas or habitats of mammals, or the measures have to be provided in order to ensure the preservation of habitats.

Documents addressing the marine environment, which must be taken into account in the preparation of MSP and impact assessment (the list is not exhaustive):

- Directive 2008/56/EC of the European Parliament and of the Council establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
- Council Directive 2009/147/EEC on the conservation of wild birds
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy
- Regulation (EU) No 1255/2011 of the European Parliament and of the Council establishing a Programme to support the further development of an Integrated Maritime Policy
- HELCOM guidelines
- Estonian Climate Change Adaptation Development Plan until 2030
- Nature Conservation Development Plan until 2020
- Estonian Environmental Strategy until 2030
- Estonian Marine Strategy Action Plan
- HELCOM Baltic Sea Action Plan
- Helsinki Convention on the protection of the Baltic Sea
- IMO guidelines

1.2.2 FISHERIES AND AQUACULTURE

Maritime spatial planning requires the creation of spatial prerequisites for the **sustainable development** and **competitiveness** of fisheries and aquaculture as an economic sector.

Pursuant to Article 14, section 2, subsection 5, MSP must determine measures to ensure the functioning of fisheries and aquaculture in Estonia.

MSP must create spatial prerequisites:

- for the natural regeneration of fish resources;
- for ensuring the effective use of fish resources, including for the free access of fishing vessels and fishing boats to the fishing areas (coastal fishing and trawling), as well as to fishing ports and unloading sites;
- for the deployment of appropriate marine areas for different and innovative aquaculture (including mussel and algae) developments.

Documents addressing the development of fisheries and aquaculture, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- Regulation (EU) No 1380/2013 of the European Parliament and of the Council on the Common Fisheries Policy;
- Directive 2008/56/EC of the European Parliament and of the Council establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
- Communication of the European Commission "Strategic Guidelines for the sustainable development of EU aquaculture"
- Communication of the European Commission "An Integrated Maritime Policy for the European Union"
- Communication of the European Commission "Europe 2020: A strategy for smart, sustainable and inclusive growth"
- Estonian Fisheries Strategy 2014-2020
- Estonian Environmental Strategy until 2030
- Estonian Aquaculture Sector Development Strategy 2014-2020
- Nature Conservation Development Plan until 2020

1.2.3 MARITIME TRANSPORT

MSP is required to create the prerequisites for the **comprehensive development of national and international maritime transport system,** which allows the free movement of people and goods in an accessible, convenient, fast, safe and sustainable way.

Pursuant to Article 14, section 2, subsections 3 and 4 of the Planning Act, MSP must take into account the location of waterways and, where necessary, it has to make recommendations for rerouting or for planning new waterways MSP has to determine the location of harbours.

MSP must:

- determine the spatial priorities for shipping, based on current use and future trends;
- determine the land-sea connections[2] so that they would bring about additional benefits and support the objectives set in the transport and maritime policies;

[2]Hereinafter, the land-sea connections are considered to be such activities that take place either at sea or on land, but support respectively activities that take place on land or at sea. For example, for fishing it is necessary to have a fishing port or unloading site on land, for maritime rescue operations, an access from land to the sea must be guaranteed, and for maritime transport, it is essential to have harbours.

- ensure the growth possibilities of maritime transport in the process of planning of other maritime activities, and take into account the spatial constraints on maritime transport arising from the planning of other activities;
- identify and take into account navigational constraints and opportunities that influence spatial planning or further operation of other activities (e.g. wind parks, cables, tunnels, etc.);
- upon submitting proposals for rerouting the fairways, identify the impact thereof to the competitiveness of maritime transport, guarding the state border, maritime safety and to other activities.
- analyse the need for establishing speed limits for ships in Tallinn Bay area;
- take into account the needs when establishing ice roads (winter roads);
- take into account the needs of small vessel traffic and recreational shipping.

Documents addressing the development of maritime transport, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- IMO regulations
- Estonian Maritime Policy 2012-2020
- Transport Development Plan 2014-2020
- Small Harbours Network Concept 2014-2020
- Regulation (EU) No 1315/2013 of the European Parliament and of the Council of on Union guidelines for the development of the trans-European transport network

1.2.4 MARINE RESCUE AND POLLUTION CONTROL

Maritime spatial planning is required to create spatial prerequisites for a safe and sustainable use of marine areas, while taking into account the **needs of marine rescue** and giving guidelines for increasing the **effectiveness of marine pollution control**.

Pursuant to Article 14, section 2, subsection 2 of the Planning Act, the maritime spatial plan must determine the measures required for the protection of marine environment. Marine rescue and pollution control are directly linked to other activities at sea, therefore they fall under “other tasks” in Article 14, section 2, subsection 13 in the Planning Act.

MSP must:

- analyse the overall situation of coastal areas in relation to access to the sea for marine rescue and pollution control;
- take into account the need and create necessary spatial prerequisites for increasing the capacity of marine rescue (including volunteer rescue);
- take into account the need and create necessary spatial prerequisites to increase the capacity of discovering, localizing and tackling marine pollution;
- deliberate the need for giving guidelines for providing accesses from land to the sea (for example minimum distance between access points);
- provide the decrease in likelihood of major accidents when planning the use of marine areas;
- deliberate the need and possibilities for setting principles of conflict resolution, incl in the EEZ.

Documents addressing marine rescue and pollution control, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- IMO regulations
- Estonian Maritime Policy 2012-2020
- Transport Development Plan 2014-2020
- International conventions for the prevention of marine pollution (MARPOL 73/78, INTERVENTION, LDC, OPRC, HNS Protocol).

1.2.5 ENERGY PRODUCTION

Maritime spatial planning requires the creation of prerequisites for **sustainable energy production** in marine areas, which ensures and guarantees the energy security of Estonia and increases the diversity of energy sources.

According to Article 14, section 2, subsection 12 of the Planning Act, it is necessary to determine the location and general building conditions of construction works that do not have a permanent connection to the shore.

MSP must:

- define the spatial principles for covering regional energy needs through the use of renewable energy sources. For this reason, MSP must:
  - define the areas suitable for the development of wind farms and the development principles applied to those areas considering the role of wind farms in switching to climate-friendly energetics;
  - describe the possibilities of developing other renewable energy sources (wave energy, biomass, heat exchange) and create the conditions for their wider deployment.

Documents addressing the development of energy production, which must be taken into account in the preparation of MSP and impact assessment (the list is not exhaustive):

- The draft of Estonia's Long-Term Development Plan of the Energy Sector 2030+ (ENMAK)
- Communication from the European Commission “Energy Roadmap 2050”
- Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources

1.2.6 INFRASTRUCTURE NETWORKS LOCATED ON THE SEABED

MSP is required to create the prerequisites for **the establishment and development of national and international connections**, which promote the stronger connection of Estonia to the integrated transmission networks.

Pursuant to Article 14, section 2, subsection 12 of the Planning Act, the maritime plan must identify suitable areas for constructing energy, gas and communication networks.

MSP must:

- determine the spatial principles and, if possible, locations for interconnections between off-shore energy production units and for their connection to the transmission system in mainland as well as potential connections between, for example, Estonia and Finland, Estonia and Sweden or Estonia and Latvia.

- determine the spatial principles for the further development of Estonian gas network and for the improvement of its supply possibilities.
- analyse the need for setting spatial conditions for the long-term planning of linear spatial objects located on the seabed.
- create spatial preconditions for expanding gas supply possibilities through the planning of regional and local LNG terminals in suitable locations.

Documents addressing the development of infrastructure networks, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- The draft of Estonia's Long-Term Development Plan of the Energy Sector 2030+ (ENMAK)
- Regulation (EU) No 1315/2013 of the European Parliament and of the Council of on Union guidelines for the development of the trans-European transport network

1.2.7 POTENTIAL PERMANENT CONNECTIONS

Maritime spatial planning must consider the needs **of potential permanent transport connections** (bridges or tunnels), in order to meet the need for fast and safe transport for goods and passengers.

Pursuant to Article 14, section 2, subsection 12 of the Planning Act, the maritime plan must identify suitable areas for constructing energy, gas and communication networks.

MSP must:

- take into account the possible development of the permanent connection between Saaremaa and mainland, Vormsi island and mainland and the Tallinn-Helsinki tunnel.
- determine the potential locations of permanent connections;
- take into account the impacts from potential future permanent connections when setting the development perspectives of other sectors.

Documents addressing possible permanent connections, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- National Plan Estonia 2030+
- Transport Development Plan 2014-2020
- FinEst link feasibility study
- Lääne County plan 2030+

1.2.8 MARITIME TOURISM AND RECREATION

MSP must **maintain and increase the recreational and tourist value of marine and coastal areas**, including locations for active holidays, and provide holidaymakers and tourists with the opportunity to use these diverse services without difficulty.

Pursuant to Article 14, section 2, subsection 10 of the Planning Act, MSP must define recreation areas and determine the conditions of their use.

MSP must create spatial prerequisites:

- depending on the small harbours network[3] concept and on the local needs (taking into account, inter alia, the comprehensive plans) and in order to plan home and guest ports which are at an optimal distance from each other, provide a diverse range of services and have a sufficient amount of berths;
- to establish land-sea connections that promote businesses in coastal regions, e.g. the construction of an infrastructure that is well connected to the small harbours network;
- to preserve and to use the tourist attractions (for example, natural and cultural heritage) important for tourism industry and for regional cooperation. Hereby, the special features concerning the location and use, including seasonal impact must be taken into account;
- to ensure access from land to public coastal areas, such as beaches and bathing areas suitable for different recreational activities;
- for practising water motorsports in the places that are well accessible and where such activities have as small impact to the environment as possible and do not compromise other activities;
- to create and to maintain possibilities to engage in non-motorised maritime tourism and water sports;
- to preserve underwater monuments and cultural heritage, including with regard to objects with a need of access.

Documents addressing the development of maritime tourism, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- Estonian National Tourism Development Plan 2014-2020.
- Small Harbours Network Concept 2014-2020
- Comprehensive plans, development plans and other local development documents of local governments

1.2.9 AREAS AND OBJECTS UNDER PROTECTION

The sustainable use of marine area must occur in a way that **ensures the preservation of protected objects** (cultural monuments, heritage conservation areas, Natura 2000 network sites, protected areas, special conservation areas, protected species, and protected natural objects) **and the protection of objects with possible conservation value**.

Pursuant to Article 14, section 2, subsections 2, 6 and 11 of the Planning Act, MSP must take into account protected areas and objects and the conditions for their use, and determine the measures required for the protection of marine environment and to ensure the preservation of heritage values.

In order to meet the objective and to fulfil this task, MSP must:

- if necessary, submit proposals for the protection of valuable objects and designating the new protection regime;
- take into account the interests of cultural heritage and environmental protection during the planning of other activities, in order to ensure the sustainable development of maritime economy and the preservation of protected objects;
- if necessary, submit proposals for the modification or termination of the protection regime of protected objects.

[3] The Concept of Small Harbours Network is currently in revision by Estonian Ministry of Economic Affairs and Communications.

Documents addressing the protection of objects, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- Nature Conservation Development Plan until 2020
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
- Council Directive 79/409/EEC on the conservation of wild birds
- The UNESCO Convention on the Protection of the Underwater Cultural Heritage
- CBD (Convention on Biological Diversity)

1.2.10 NATIONAL DEFENCE

Maritime spatial planning must ensure that **national defence needs** are met both via the provision of training opportunities and the work ability of national defence objects.

Pursuant to Article 14, section 2, subsection 8 of the Planning Act, the purpose of the maritime plan is to identify marine areas that serve national defence purposes and to define the conditions for their use.

In order to meet the objective and to fulfil this task, MSP must create spatial prerequisites:

- for the establishment of exercise areas;
- for access to exercise areas from land;
- for preserving the work ability of national defence objects in case of planning other objects.

Documents addressing the development of national defence, which must be taken into account in the preparation of MSP and impact assessment (the list is not exhaustive):

- National Defence Development Plan 2017-2026
- Development program: the selection of locations for sea-oriented exercise areas of air defence and artillery as well as the selection of locations for exercise areas of the navy

1.2.11 MINERAL RESOURCES AND DUMPING

MSP requires that the possibility of **extraction of mineral resources** from the seabed is maintained and the **principles for dumping** the dredging material in the sea are followed.

Pursuant to Article 14, section 2, subsection 9, the maritime spatial plan must ensure measures required in order to commence the exploitation of mineral resources and to determine the land use conditions concerning areas influenced by the mining of mineral resources.

In order to meet the objective and to fulfil this task, MSP must create spatial prerequisites:

- for preserving the possibility of extraction of mineral resources;
- for the deployment of dumping areas.

Documents addressing the deployment of mineral resources and the development of dumping, which must be taken into account in the preparation of maritime spatial plan and impact assessment (the list is not exhaustive):

- National Development Plan for the Use of Mineral Resources Used in Construction 2011-2020.
- HELCOM guidelines
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London convention 1972), 1996 protocol to the convention

1.2.12 COASTAL COMMUNITIES

MSP must **take into account the long-term spatial needs and values of coastal communities**, which affect the use of coastal areas and the attractiveness of the living environment as well as carrying out different activities in the marine area.

Maritime spatial planning considers coastal communities as groups, who are in a cultural sense involved with the sea through heritage and/or roots, subsistence or way of living. In order to meet the objective, the spatial planning process should identify the values of coastal communities in different regions with regard to the sea and its use and the communities' long-term spatial needs at sea and in coastal areas. Planning of other activities should take into account the values and needs of coastal communities, while balancing national and local public interests.

Documents addressing the activities of coastal communities in using coastal areas, which must be taken into account in the preparation of MSP and impact assessment (the list is not exhaustive):

- National Plan Estonia 2030+
- Hiiu and Pärnu county maritime spatial plans
- County plans
- Comprehensive plans, development plans and other local development documents of local governments
- Base study for MSP "Mapping of culturally and socially important objects"

2. THE PRINCIPLES OF MARTITIME SPATIAL PLANNING

Maritime spatial planning must be guided by a number of *principles agreed upon* in the Planning Act and in the course of international cooperation, aiming at creating key criteria for the development of planning solutions and ensuring common ground for addressing cross-border issues.

The objective of the preparation of MSP is to agree upon the long-term utilisation principles of the maritime area, but the planning solution must be flexible enough to ensure the implementation of such activities in the maritime area which are not planned today but might become necessary in the future. Thus, MSP must be open to innovation – that both in the context of human activities as well as in the context of preserving or improving the status of the environment.

2.1 The Principles of the Planning Act

2.1.1 PRINCIPLE OF IMPROVING THE LIVING ENVIRONMENT

Pursuant to Article 8 of the Planning Act, a spatial plan must, while preserving existing values, establish the preconditions for the existence and preservation of a user-friendly and safe living environment and of a spatial structure that reflects the values of the community, and for the development of aesthetic surroundings.

Although in the Planning Act, this principle is mainly directed to terrestrial planning, the principle of improving the environment is also applicable in the marine area. The main objective of the principle is to ensure that MSP *promotes the quality of marine space*, both from the natural environment as well as from the non-natural environment point of view, thus balancing different sectors.

Improving the quality of marine space may also include the need to *preserve the values already existing* – for example, by prioritising fisheries as an economic activity in a certain region, emphasising and preserving the historical tradition of a coastal community, etc. Thus, the principle of improving the living environment is also related to other principles set out in the Planning Act – the principle of inviting the public to participate and of informing the public, which aims to identify different interests and values, and the principle of balancing and integrating interests. The balancing of interests is the basis for having a high quality marine environment.

In this principle, user friendliness is also an important criterion to be mentioned. Marine area has different uses - fisheries, maritime transport, energy production, etc. User friendliness also depends a lot on the sector. Therefore, upon maritime planning it is important to observe that in setting the terms and conditions or principles of use for various sectors, *the reasonable implementation of the activity must be preserved*, including, among other things, with regard to other areas of activity.

2.1.2 PRINCIPLE OF INVITING THE PUBLIC TO PARTICIPATE AND OF INFORMING THE PUBLIC

Pursuant to Article 9 of the Planning Act, the planning proceedings are public. *Everyone is entitled to participate in the planning proceedings* and, during those proceedings, express his or her opinion regarding the spatial plan. In order to provide everyone with the opportunity to participate and express their opinion, the Ministry of Finance as the organiser of the preparation of MSP has the duty to properly inform the public about the planning of the marine area, and the duty to organise public displays and discussions to the necessary extent. Publicity and inclusion are, on the one hand, necessary in order to enable different stakeholders to protect their interests and values during the planning proceedings. On the other hand, public opinion is also important for the organiser of the plan, to ensure a balanced planning solution with the help of such opinion. A well-balanced planning solution is, in turn, a key to the implementation of MSP after its adoption, as it is accepted by various authorities, stakeholders and communities that enable different activities in the marine and coastal areas.

2.1.3 PRINCIPLE OF BALANCING AND INTEGRATING INTERESTS

In accordance with the principle stipulated in Article 10 of the Planning Act, during the establishment of the planning solution, *different interests and values*, including public and private interests and values, as well as different sectoral interests – economic, social, cultural and environmental long-term spatial interests in the marine area must be balanced.

The spatial interests and values on the basis of which the planning solution will be prepared result from various national and local level plans, strategies and other documents guiding development. In addition to development documents, sectoral interests and values also arise from the objectives and needs of different stakeholders. All these interests and values must be balanced in the preparation of the planning solution.

MSP shall be prepared as a national spatial plan. It is a state-level plan, the implementation of which depends on lower-level plans (e.g. general or detailed plans of the local government), and various permit granting procedures or other documents regulating the use of the marine area. Although due to its nature, MSP does not impose compulsory land use and building conditions for coastal areas, the preparation of MSP must take into account the plans and other development documents and permits introduced in the coastal municipalities, but also ensure the implementation of MSP after its adoption through the same documents.

2.1.4 SUFFICIENCY OF INFORMATION AS THE BASIS OF MARITIME PLANNING

In accordance to Article 11, section 1 of the Planning Act, the authority that organises planning work must, when making planning arrangements, take into account relevant strategies, risk analyses, existing spatial plans, development plans and other documents that have an impact on spatial development, as well as other relevant information.

MSP must be prepared on the basis of best available information. *Relevant information* will be provided through basic analysis, collaboration with various authorities, local authorities, research institutions, local communities and sectoral stakeholders. In order to prepare the plan, the Ministry of Finance has gathered available data from various agencies, the updating and amendment of which takes place on an ongoing basis during the preparation of MSP.

In 2016, the Ministry of Finance has commissioned the following *basic analyses*[4] that shall be implemented in the preparation of the maritime planning solution:

1. *Model for the economic benefits* derived from the use of marine resources
   The model for the economic income, expense and benefits derived from the use of marine areas in order to assess the economic income, expense and benefit of the current economic activities in the maritime area and to predict future changes resulting from alternative space solutions and / or possible changes in significant input data.
2. *Ice analysis* and mapping.
   Maps were prepared showing the likelihood of ice presence and the durability of ice cover, a worst case scenario map on the basis of 2010/2011, a map showing the likelihood of ridged ice presence, etc.
3. Collecting data on the *birds` migration corridors* located in the Estonian marine area, creating corresponding map layers and preparing an analysis about the effects of wind parks in the *nutrition areas of birds.*
4. *Study on the migration of bats* from Saaremaa to south or southwest across the sea.
5. *Collection and analysis of source data for the assessment of socio-cultural impacts.*
6. *The identification of suitable areas for fish farming* in Estonian marine area.
7. *The identification of suitable areas for the cultivation of invertebrates and algae*.

If an opportunity and need arises, additional surveys and analyses will be commissioned in the course of the maritime planning process.

In the framework of the Baltic Scope project carried out between 2015 and 2017, the Estonian Marine Institute of the University of Tartu in cooperation with the Ministry of Finance and sectoral stakeholders prepared sectoral terms of reference for fisheries, energy, maritime transport and marine environment. These terms of reference analyse the current situation and make proposals for the issues that need to be addressed in the preparation of MSP. The terms of reference have been taken into account when drafting the outline of MSP and they are available on the website of the Ministry of Finance.

The required information and background data will be specified and completed during the preparation of MSP.

2.1.5 PRINCIPLE OF EXPEDIENT, REASONABLE AND ECONOMIC LAND USE

The principle of expedient, reasonable and economic land use set out in Article 12 of the Planning Act is mainly aimed at terrestrial planning, but this principle is also applicable to maritime areas. Just as terrestrial planning, maritime planning must ensure that the planned activities are *expedient, reasonable and sustainable*.

Expedience means that first of all, the areas already in use or withdrawn from use must be used. At sea, this means that the marine areas already in use must be preferred or co-use must be promoted. Co-use means that several activities are carried out in the same marine area, if such activities are not mutually exclusive or if the co-use does not have a significant impact on marine environment.

Reasonable use of maritime space means that different human activities are planned in such areas of marine space where they are best suited – that depending on the marine environment or the nature of other activities or the particular activity itself. First of all, it is important to create a

[4]Available online: www.fin.ee/mereala-planeerimine

planning solution which is as environmentally friendly as possible, but which does not make carrying out a human activity in the designated maritime area unreasonable.

Therefore, it is necessary to analyse the patterns of important human uses in Estonian marine areas and promote achieving or preserving the good environmental status of marine ecosystems during MSP.

2.2 Ecosystem approach and sustainable development

In recent years, the principle that maritime spatial planning must be based on *ecosystem approach* has been internationally recognised. Based on the EU Directive 2008/56/EC (Marine Strategy Framework Directive) the marine environmental policy framework has been established. Member states shall take necessary measures to preserve or achieve by 2020 the good status of marine environment. The EU Directive on maritime spatial planning also states that the Member States must apply an ecosystem approach to maritime planning and its implementation (Article 5 (1)).

There are several very different definitions of the ecosystem approach. In short, the ecosystem approach means that the use of marine space must be planned in a way that ensures the long-term viability of *marine ecosystems*. That means, in turn, that in planning, all alternatives and decisions must be considered, first of all, from the perspective of preserving the good status of marine ecosystems.

An important input for the implementation of the ecosystem approach in maritime planning is provided by impact assessment.

In the Baltic Sea Region, the principle of ecosystem approach is presented in the HELCOM / VASAB Maritime Spatial Planning Working Group guidelines and in the framework of the Baltic Scope project.

HELCOM/VASAB guidelines for the implementation of ecosystem-based approach[5] emphasise several principles that must be followed in maritime spatial planning and carrying out impact assessment in order to ensure the ecosystem approach. These include, among others, the precautionary principle, using the best available knowledge and practice, the importance of alternative development plans, the perception and understanding of connections between different activities and their impact, etc. However, according to the guidelines, not only should the basis of the ecosystem-based approach comply with the principles, but also *comprehension of the Baltic Sea as an ecosystem and its state*.

An ecosystem approach checklist was developed within the framework of the Baltic Scope project[6], which would help to control step-by-step in the maritime planning that the ecosystem approach is really applied. The purpose of the checklist is to ensure that elements of the ecosystem approach are taken into account in the maritime planning. The checklist developed within the framework of the Baltic Scope project is also used in the Estonian maritime planning.

[5] www.vasab.org/index.php/documents/doc_download/967-guidelines-for-the-implementation-of-ecosystem-based-approach-in-maritime-spatial-planning-msp-in-the-baltic-sea-area
[6] www.balticscope.eu/content/uploads/2015/07/BalticScope_Ecosystem_Checklist_WWW.pdf

2.3 Cross-border cooperation

The sea is very dynamic in its nature. The constant movement of water masses means that different and also geographically separated marine areas are interconnected and the impact of disturbance factors can reach very far. In general, marine environment is always an *important international interest*.[7]

The EU Directive on maritime spatial planning also states that in order to ensure the coherence and consistency of MSPs, those *Member States* who own maritime boundaries must *cooperate* as part of the planning process (Article 11 (1)). In addition, the directive states that the Member States shall, as far as possible and following the international legislation and conventions, try to cooperate in relevant maritime areas with the relevant *third countries* (Article 12).

For Estonia, it means that maritime planning must definitely include cooperation with Finland, Sweden, Latvia and Russia. The cooperation may be organised with the help of various *international forums*, such as HELCOM-VASAB Maritime Spatial Planning Working Group, whose member is also Russia, or *international cooperation projects*, e.g. Baltic SCOPE[8], Plan4Blue, BalticLines, etc. Also bilateral meetings regarding cross-border issues will be held if needed.

Within the framework of the abovementioned *Baltic SCOPE* project, Estonia has worked closely with the authorities responsible for maritime planning in Sweden and Latvia. The project has harmonised approaches to cross-border maritime planning and set goals and recommendations for further cooperation.

Plan4Blue is a cooperation project between Estonia and Finland aimed at creating blue economy scenarios to the region of the Gulf of Finland. Through this cooperation project, it is possible to work closely with Finland on maritime planning and on the harmonisation of plans.

MSP is also subject to impact assessment. Since in maritime areas, the environmental damage may spread very far both within the country as well as to the maritime areas of other countries, it is *essential to assess the cross-border impact* when drafting MSP. Cross-border impact assessments are regulated by several international conventions and Environmental Impact Assessment and Environmental Management System Act, however, they are based on *Espoo Convention*[9] (The Convention on Environmental Impact Assessment in a Transboundary Context). Espoo convention is a convention between states which lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. Cross-border impact assessments are managed by the Ministry of the Environment of the basis of the Environmental Impact Assessment and Environmental Management System Act.

2.4 Blue growth – blue economy and the balance of interests

Blue growth is the initiative of the European Commission to promote the development potential of seas, including the Baltic Sea as economic drivers. *Maritime economy* of the Baltic Sea region

[7]Marine spatial planning methodology. Hendrikson&Ko, 2009. Available online: http://hendrikson.ee/wp-content/uploads/2016/03/Merealade_planeerimise_metoodika.pdf
[8]The website of Baltic Scope project is available at www.balticscope.eu
[9] http://www.unece.org/env/eia/welcome.html

includes both traditional and new sectors – shipbuilding and maritime transport, fisheries, tourism, renewable energy, etc. One of the measures for achieving the goals of blue growth is maritime planning.

Although on one hand, maritime spatial planning must take into account an ecosystem-based approach and on the other hand, find ways to promote blue growth, both emphasise *the balance of interests*. Ecosystem-based approach gives priority to the protection of marine ecosystems, but at the same time recognises the need to get the most benefit from the *exploitation of marine resources*. Blue growth strategy emphasises the need to exploit the unused marine resources for the benefit of new jobs and *economic growth*, but at the same time protects the biodiversity and the *marine environment* and maintains the services provided by healthy and resilient marine and coastal ecosystems.[10] According to the planning act, the objective of any spatial plan is to create, by promoting environmentally sound and *economically, culturally and socially sustainable development*, the preconditions that are necessary for democratic, long-term and *balanced spatial development* that takes into account the needs and interests of all members of the Estonian society. Thus, the aim of the Estonian MSP is to balance different interests.

[10]Communication of the European Commission „Blue Growth opportunities for marine and maritime sustainable growth". European Commission, 2012.

3. IMPACT ASSESSMENT

Impact assessment, including the strategic environmental assessment (SEA) (hereon after: *impact assessment*) was initiated by the order no. 157 of 25 May 2017 of the Government of the Republic "The initiation of the thematic national spatial plan of Estonian marine areas, its adjacent coastal areas and the economic zone, and its strategic environmental assessment".[11] The SEA initiated in the framework of impact assessment with regard to the Estonian MSP was initiated without justifying such need, as carrying out the SEA in the framework of national maritime spatial planning is mandatory (Article 13, section 4 of the Planning Act, Article 33, section 1, subsection 2 and Article 35, section 2 of the Environmental Impact Assessment and Environmental Management System Act). The SEA is aimed at the planning document with the purpose to integrate environmental protection and sustainable development principles to the planning document. Impact assessment will assess impacts on the natural environment, including health, impact on the social environment and on the cultural environment. Usual practice, SEA directive and Estonian legal acts support a rather natural environment specific approach to SEA. But other impacts, such as impacts on the social, cultural and economic environment, are also important when implementing plans. Therefore, a more comprehensive impact assessment will be carried out during the Estonian MSP process, integrating also the social, cultural and economic impacts to the assessment.

During the MSP process, *relevant* social, economic, cultural, natural environment and health impacts will be assessed. This means that both *significant and common impacts* will be assessed. If, during the planning process, additional relevant impacts arise, the assessment of this relevant impact must be carried out in order to ensure the development of a balanced planning solution. The emergence of the need for an additional impact assessment in the preparation of the plan is a natural part of the planning process.

The preparation and introduction of the Estonian MSP must take into account in a **balanced way** the marine environment as well as social, economic, cultural and other important aspects.

Impact assessment will be carried out in accordance with the accuracy level of the preparation of the Estonian MSP. The national MSP lies in the most strategic planning level in Estonia, which does not determine the specific location of potential buildings or specific environmental conditions. This means that:

1. it is necessary to assess the compliance of the planning solutions developed[12] for achieving the objectives of the Estonian MSP and sectoral sub-objectives with various international, European Union and Estonian national strategic objectives. If planning solutions developed for achieving the objective or sectoral sub-objectives are not in compliance with international, European Union or Estonian national sectoral policy objectives or do not support the implementation of these policies, it can be assumed that the respective part of the planning solution does not contribute to achieving this strategic objective. The most important sectoral policy documents are listed in Section 1.1 of this document.
2. If the planned accuracy level of the activities planned in the Estonian MSP permits, it is necessary to assess, in addition to the compliance with policies, the more specific significant

[11]The order for the initiation of MSP is available in Riigi Teataja: https://www.riigiteataja.ee/akt/330052017003. The explanatory memorandum and annexes to the order of initiation can be found on the website of the Ministry of Finance: www.fin.ee/mereala-planeerimine

[12] Upon the preparation of the plan, alternative spatial development scenarios shall be developed, which will serve as the basis for the conduction of public discussions and the development of the best possible planning solution.

impacts and if necessary, make recommendations or set the requirements to assess significant adverse impacts in the development consent[13] processing stage or in the framework of other activities following the preparation of MSP.

Impact assessments do not elaborate different impact assessment alternatives but evaluate the *compliance of planning solutions* developed in the planning proceedings with strategic objectives or expected significant adverse and beneficial impact.

In the process of preparing the Estonian MSP, the impact assessment must constantly monitor whether the implementation of the planned activities *support the achievement of strategic objectives* and whether such activities *are expected to have a relevant impact*. If it appears that there is a non-compliance with the strategic objectives or an expected relevant impact, then such issues must be addressed. Taking into account the accuracy value of the Estonian MSP, it is necessary to take measures in order to support the achievement of strategic goals or prevent, avoid, reduce or mitigate, or to remedy, if justified, or monitor, if necessary, the *relevant impacts*. In addition, the impact assessment during the planning process must pay attention to the *significant beneficial impact* and the possibilities for its amplification.

During impact assessment, *all relevant impacts* must be assessed in the entire range of influence of the relevant impact (i.e. the terrestrial areas are not in the planning area, but there might be significant impacts affecting it). If necessary, the significant impact coming from outside the planning area or reaching the planning area (e.g. nutrients reaching the sea via rivers) must also be taken into account. During impact assessment, it must be identified whether the relevant impact is *beneficial, adverse, direct, indirect, long-term, short-term, cumulative or synergistic*.

The description of the relevant affected environment shall be provided in the impact assessment report or in the composition of other planning documents.

The preparation of the Estonian MSP and impact assessment must take into account[14] the measures and spatial extent of the measures set in the Estonian Marine Strategy Action Plan in order to achieve and preserve a *good condition of the marine environment*. The links between the Estonian MSP with other significant strategic planning documents can be found in Section 1.1. of this document.

First and foremost**,** impact assessment is based on the *best available knowledge*, including international experience, taking into account the results of ongoing, completed or soon to be initiated international projects, such as Baltic Scope, Pan Baltic Scope, Plan4Blue, SustainBaltic, etc. The studies underpinning the planning and impact assessment are discussed in Section 2.1.4 of this document.

The intention to develop impact assessments is the basis for drawing up an impact assessment report. The impact assessment report concentrates on all impacts (impact on the natural

[13] In accordance with Article 7 of the Environmental Impact Assessment and Environmental Management System Act, the development consent is a building permit or a permit of use of a building; an integrated environmental permit or an environmental permit within the meaning of the General Part of the Environmental Code Act or a superficies licence; geological exploration permit or a permit for general geological survey; other documents not specified in this section permitting the proposed activity with potentially significant environmental impact.

[14] More information is available on the website of the Ministry of the Environment at http://www.envir.ee/et/merestrateegia.

environment, impact on the economic environment, impact on the social environment, impact on the cultural environment and health impact). It is important to observe that the impact in *one sector will not dominate* the impacts in other sectors, and that for this reason some of the impacts will not be underestimated or left in the background. In order to achieve a balanced planning solution, a number of experienced experts are involved in the MSP process. The evaluators of the different impacts *must cooperate with each other* and be kept updated with the content of the assessment of other impacts. The presentation of the characteristics of relevant impacts, mitigation measures of possible impacts and the possibilities to amplify beneficial impacts help to accomplish compromises between conflicting interests and achieve goals set for MSP.

This is because of the fact that it is not known at the stage of the assessment of the impacts in which locations and to which elements of the natural environment the expected significant adverse and beneficial impact may appear. It is also unknown what are the expected significant adverse and beneficial economic, socio-cultural impacts and health effects. Therefore, it is not possible to provide final information on assessment methodology of the expected adverse and beneficial impacts during the design phase of the impact assessment.

It is expected to use the following analyses for the assessment of relevant impacts:

1. *conformity analysis*, which clarifies whether the planning solutions developed to achieve the objective and sectoral sub-objectives of the Estonian MSP contribute or do not contribute to the achievement of various international, European Union and Estonian national environmental policy objectives;
2. *external impact analysis*, which clarifies whether the planning solutions developed to achieve the objective and sectoral sub-objectives of the Estonian MSP are expected to have relevant or beneficial impact on the natural, economic, socio-cultural environment and human health. For the external impact analysis, first of all, the qualitative (descriptive) assessment and, if possible, the quantitative assessment is used, i.e. if the accuracy value of the activities planned within the framework of Estonian MSP allows it. Qualitative impact assessment must be based on data sources (e.g. previous studies, national database data, GIS applications, etc.), which enable to draw reliable conclusions;
3. *cost-benefit analysis* (in addition to the abovementioned assessment of economic impact), whereas one of the key assessment tool is the model for the economic benefits derived from the use of marine resources[15], which enables to assess the economic cost and benefit of square kilometres of maritime areas and their difference as the economic profitability for both the state as well as the entrepreneurs. The model is made for three main maritime sectors: fisheries, energy and maritime transport.

The final selection of assessment methodologies shall be made in the following stages of the planning proceedings. It is necessary to use the *generally recognised assessment methodologies*, the choice of which must be coordinated beforehand with the organiser of the planning activities.

A *separate SEA report is not prepared* in the framework of impact assessment. Among other things, the content of the impact assessment report must comply with the SEA report requirements set out in the Environmental Impact Assessment and Environmental Management System Act. During impact assessment, it is necessary to follow the procedure set out in the Environmental Impact Assessment and Environmental Management System Act and comply with the content requirements laid down by the same act. Impacts shall be assessed and results shall be disclosed under a unified time schedule. Please refer to Section 4 to see the impact assessment schedule.

[15]The economic benefit model is accessible on the website of the Ministry of Finance at http://www.fin.ee/planeeringud.

Persons and agencies that may be expected to be affected by the planned activities of the Estonian MSP or who may have a legitimate interest in the Estonian MSP can be found in the participation plan.

Impact assessment shall be carried out as a cross-border action (see Chapter 2.3 for more details).

3.1 Assessment of relevant impacts on the natural environment

During the preparation of Estonian MSP, the compliance of the planned activity with sectoral strategic objectives shall be evaluated and, if possible, the expected relevant impact on the natural environment shall be assessed, in order to *take environmental considerations into account* in the preparation and introduction of the plan and thus ensure the development of a balanced planning solution, including a high level of environmental protection, and in order to promote sustainable development.

The occurrence of an expected relevant impact on the natural environment or non-compliance with the strategic objectives of the natural environment depend on the nature of the activities planned in MSP, the locations where such activities are planned to be carried out and the environmental conditions in those locations. Given the size of the planning area, the planned activities, the precision of the plan, and the fact that at the moment, it is not known what and where is planned, it is not possible to describe in the intention to develop an impact assessment what is the expected relevant impact on the natural environment and Natura sites that is expected to occur due to the introduction of MSP, or what is the expected non-compliance with some of the strategic objectives of the natural environment.

The possible sources of expected relevant impacts may be: noise, vibration, electromagnetic radiation, suspended solids, particulates, etc. The planning process must constantly assess whether the planning solutions developed for the achievement of the objectives of MSP and sectoral sub-objectives comply with sectoral strategic objectives and whether planning solutions are expected to cause relevant impacts on the natural environment, and namely on:

1. Biodiversity, including:
    - marine fauna, especially on benthos, fish, mammals and birds;
    - marine flora and in particular on red algae due to harvesting, other species in relation to permanent or temporary disturbance of habitats;
2. the seabed;
3. hydrological regime of the sea, including waves, water regime and quality;
4. air, including air quality and the movement of air masses (winds).

If the planning process shows that there is an expected relevant impact on one of the abovementioned elements of the natural environment and the relevant assessment is carried out with concerning this element, it is necessary to assess additionally whether the changes in natural environment caused by the significant adverse impact bring about an expected relevant impact on climate change for example. It is important to analyse, if the planning solution contributes to climate change adaptation.

If the impact assessment on the natural environment shows a relevant impact on climate change, cultural heritage, populations, people's social needs, well-being, property or health, it is necessary to identify which environment (e.g. impact on the natural environment, impact on the economic environment, impact on the social environment, impact on the cultural environment and impact on health) this expected relevant impact is affecting and address this expected relevant impact in a relevant impact assessment context (e.g. assessment of the impact on the natural environment, on the economic environment, on the social environment, on the cultural environment, impact on health or, if necessary, start an additional impact assessment).

3.2 Assessment of relevant impacts on the economic environment

During the preparation of MSP, the compliance of the planned activity with sectoral strategic objectives shall be evaluated and, if possible, the relevant impact on the economic environment shall be assessed, in order to take the economic aspects into account in the preparation and introduction of the plan and thus ensure the development of a balanced planning solution, *including economically sustainable development* (Article 4, section 2, subsection 5 of the Planning Act).

It is possible to base the economic impact assessment on well-known cost-benefit analyses methodologies, adjusting it according to information that is available.

One of the main tools for economic impact assessment in MSP is the economic benefit model developed by Estonian Ministry of Finance in 2016 and 2017[16]. With regard to the activities planned in the Estonian maritime spatial plan, the assessment of economic impacts with the help of the model, is possible in the sectors of *fisheries, energy and maritime transport*. When relevant impacts occur, other sectors will be assessed based on the information and data available.

Qualitative assessment can also be used when assessing the relevance of certain impacts. This especially applies to indirect economic impacts. The impact of marine economy on local labour market and its role on the formation of added value will also be analysed. For qualitative economic assessment, methodologies of similar studies can be used.

The main goals of assessing relevant economic impacts are:

1. to assess whether the planned activity *contributes to the achievement of sectoral strategic objectives;*
2. to consider the relevant economic impacts, including the assessment of the cost, benefit and feasibility of marine use on the public and private sector in the sectors covered by the economic impact assessment model;
3. to analyse the changing trends in economic impacts based on the planning solutions proposed in the Estonian MSP.

16 https://www.rahandusministeerium.ee/system/files_force/document_files/mereala_majanduslik_kasu_011216_loplk.pdf?download=1

3.3 Assessment of relevant impacts on the socio-cultural environment

During the preparation of MSP, the compliance of the planned activity with sectoral strategic objectives shall be evaluated and, if possible, the expected relevant *impact on the socio-cultural environment* shall be assessed, in order to take the socio-cultural aspects into account in the preparation and introduction of the plan and thus ensure the development of a balanced planning solution, including socio-culturally sustainable development (Article 4, section 2, subsection 5 of the Planning Act).

Assessment of the impact on the cultural and social environment is based on the understanding that most marine uses are more than just economic activities – they also carry certain local identity and stability for communities. Ecosystem services based approach also gives an input to the assessment of social impacts, because it emphasizes the importance of environmental perks on the wellbeing of humans.

During the preparation of MSP, it must continually be assessed whether the planning solutions and planned activities contribute to the achievement of sectoral strategic objectives and whether they impose relevant impacts on the cultural and social environment, including social needs and wellbeing, property and safety.

Assessment of the *impact on the cultural environment* and *assessment of the impact on the social environment* may be carried out as *a joint assessment*, as if there is expected to be a relevant cultural impact, there is reason to believe that there is also a relevant social impact.

Social and cultural impacts and their perceptibility are closely related to the *people who are affected*. The main objectives of the assessment of the expected significant socio-cultural impact are:

1. the assessment whether the planned activity *contributes to the achievement of sectoral strategic objectives*;
2. the assessment whether the planning solutions developed for achieving the objectives of MSP or sectoral sub-objectives are expected to bring about a *relevant socio-cultural impact* due to the expected changes caused by the significant adverse impact on the natural environment
3. the assessment of other expected relevant and beneficial socio-cultural impacts (e.g. changes in viewpoints, possible creation or loss of jobs, the limitation of an existing activity (for example, tourism, recreational activities and hobbies, fisheries, research and education) in a certain location or taking such activities to another location). If the planning proceedings show an additional relevant impact on the socio-cultural environment, it is necessary to assess the expected relevant impact.

Cultural and social impacts are approached through two different levels – the local level and the national level. The base for the assessment of cultural impacts are values - values that are subjective, which means they are not quantifiable. Due to this, cultural impacts are assessed through interviews and seminars. The goal is to develop a narrative on the use of marine areas that is based on values.

3.4 Health impact assessment

During the preparation of MSP, the compliance of the planned activity with sectoral strategic objectives shall be evaluated and, if possible, the *expected relevant health impact shall be assessed*, in order to take health-related aspects into account in the preparation and introduction of the plan and thus ensure the development of a balanced planning solution, including sustainable development with regard to human health (Article 4, section 2, subsection 5 of the Planning Act).

During the assessment of the expected relevant impact caused by the implementation of the planning solutions developed for achieving the objectives of MSP or sectoral sub-objectives, and taking into account the accuracy value of MSP, it is necessary to take measures in order to prevent, avoid, reduce or mitigate, or to remedy, if justified, or monitor, if necessary, the significant adverse impacts.

Health impacts are assessed in relevance to component (eg, the health impacts caused by the water environment) or use (eg, the impacts on health caused by different marine uses).

4. ORGANISATION OF THE PREPARATION OF MSP

4.1 Cooperation and participation

According to the Planning Act, persons and bodies that may have a legitimate interest in the relevant impact that may be presumed to result from implementation of the national spatial plan or in the directions of spatial development in the planning area; any person who has expressed an interest in being invited to participate in the preparation of the national spatial plan and authorities that might have an interest in relevant social, cultural, environmental or economic impacts or in the directions of spatial development in the planning area, including through an organization that unites them, environmental or other non-governmental organizations.

Persons and organizations that may be impacted through the activities planned or who might have a legitimate interest in the planning solution are collocated in an annexed document –participation programme[17].

Cooperation with stakeholders, authorities and other interested persons will begin in the very initial stages of the planning process. In addition to the requirements of the Planning Act, regional public discussions will be carried out to discuss the initial outline of the plan and the impact assessment intention. One of the aims of these discussions is also the mapping of cultural values of marine areas and the regional characteristics of marine use.

To simplify cooperation, a crowdsourcing function has been added to the planning portal https://mereala.hendrikson.ee. Values and uses of the marine area are expected to be added on the crowdsourcing map. The map and the proposals will be evaluated periodically. Not all the ideas, values and uses presented might not be relevant for the long-term planning of Estonian marine areas, but might refer to subjects or values that have not yet been acknowledged. Feedback on the ideas presented will be given every time after a public display of the MSP – summer 2018, spring 2019 and in the beginning of 2020.

4.2 Schedule for the preparation of the MSP

Development of MSP and the impact assessment processes are synchronized. This enables to take environmental, social, cultural and economic impacts into account when establishing the plan. This, in addition, will provide for a balanced planning solution.

[17] Will be made available at https://mereala.hendrikson.ee

The initial indicative time schedule for the preparation of the plan:

STAGE OF THE PLANNING AND IMPACT ASSESSMENT PROCESS	DEADLINE	BODIES ENGAGED
Initiation of the MSP	May 2017	Ministries, county governments, local municipalities' unions
Preparation of initial outline of the MSP	May 2017 – June 2017	Ministries, county governments
Preparation of the memorandum of intention to conduct impact assessment	May 2017 – June 2017	Ministries, county governments
Public tender for MSP and impact assessment consultant	June 2017 – December 2017	Ministries
Elaboration of initial outline of the MSP and the memorandum of intention to conduct impact assessment by consultant; asking for suggestions for improvements	January 2018 - April 2018	Bodies and persons named in the Planning Act § 18
Public display of initial outline and impact assessment memorandum	April 2018 – June 2018	Ministries, county governments, local municipalities' unions, interest groups
Preparation of the draft version of MSP and impact assessment report	June 2018 – January 2019	Ministries, county governments, local municipalities' unions, interest groups
Public display of the draft version of MSP and impact assessment report	February 2019 – April 2019	Ministries, county governments, local municipalities' unions, interest groups
Preparation of the planning solution and impact assessment report	May 2019 – October 2019	Ministries, county governments, local municipalities' unions, interest groups
Approval of planning solution and impact assessment report	November 2019 – February 2020	Bodies and persons named in the Planning Act § 22
Public display of the MSP and impact assessment report	March 2020 – May 2020	Ministries, county governments, local municipalities' unions, interest groups
Adoption of MSP	August 2020	Ministry of Finance

4.3 Information on the arrangers of the plan and the impact assessment

Authority that arranges the preparation of MSP and its impact assessment:
Estonian Ministry of Finance, Spatial Planning Department
Contact person: Triin Lepland, Adviser of Planning Department (triin.lepland@fin.ee)

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5. BACKGROUND OF MSP

Maritime spatial planning has been carried out in Estonia since 2009. The main initiator of maritime spatial planning has been the emergence of new uses of marine areas, such as energy production, which has put *additional pressure on maritime space* and has created a need for a more comprehensive solution for the use of marine space.

In 2009, the first *maritime spatial planning methodology* was prepared[18], with the aim to identify the potential for maritime spatial planning in Estonia. The methodology analysed the international practice and legislation valid at that time. According to the conclusions of the methodology, it was found possible to carry out maritime spatial planning through county plans, applying the provisions applicable to terrestrial planning.

In August 2012, the Government of the Republic adopted a *national spatial plan "Estonia 2030+"*[19], according to which it is necessary to achieve a reasonable balance with appropriate plans in the Estonian marine area between recreational use, tourism, water protection, national defence and economic activities. The action plan of the national spatial plan "Estonia 2030+" provided that maritime spatial plans shall be prepared as county plans by 2020.

Additionally, in August 2012, the Government of the Republic approved the national *development plan "Estonian Maritime Policy 2012-2020"*[20], which provides that maritime spatial planning should become the basis for directing economic activities and other activities at sea, in order to avoid conflicts between different sectors and ensure the sustainable use of marine areas and the preservation of the marine environment.

Based on the national plan, the Estonian maritime policy development plan and the developed methodology, and the results of international projects in the Baltic Sea region (for example, the BaltSeaPlan [21]), the Government of the Republic initiated in October 2012 the preparation of *first maritime spatial plans in Estonia* in the areas of the territorial sea that are adjacent to Hiiu and Pärnu counties. The purpose of the preparation of Hiiu and Pärnu plans was to carry out, for the first time in Estonia, through the planning process arising from the Planning Act, the planning of the marine area and to create a s*tarting point for planning the rest of the Estonian marine area*.

On the basis of the first experience of maritime spatial planning, the so-called second phase of the *maritime spatial planning methodology*[22] was completed in March 2015. The methodology includes an overview of how to develop a maritime planning process, how to address different sectors in the course of the planning process, what has to be taken into account when addressing maritime planning duties, and provides practical tips for involving different stakeholders. Although the methodology was based on the experience gained during the preparation of county plans, it is also applicable to the preparation of a national maritime plan.

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[18]Maritime spatial planning methodology. Hendrikson&Ko, 2009. Available online: http://hendrikson.ee/wp-content/uploads/2016/03/Merealade_planeerimise_metoodika.pdf

[19]National Spatial Plan „Estonia 2030+" Available online: https://valitsus.ee/sites/default/files/content-editors/arengukavad/eesti_2030.pdf

[20] National development plan „Estonian Maritime Policy 2012-2020". Available online: https://www.mkm.ee/sites/default/files/merenduspoliitika.pdf

[21]BaltSeaPlan project supported by the Baltic Sea Program 2007-2013. Available online: www.baltseaplan.eu

[22]Maritime spatial planning methodology. Hendrikson&Ko, 2015. Available online: https://coastalandmaritime.files.wordpress.com/2015/07/mrp-metoodika_lc3b5plik.pdf

During the preparation of the county plans, two important developments in the legal framework took place, which influenced and still significantly influence maritime spatial planning in Estonia. First, in July 2014, the European Parliament and the Council adopted *a directive establishing a framework for maritime spatial planning*. The directive imposes an obligation on Member States to establish maritime spatial plans by March 2021 at the latest, and a series of minimum requirements to comply with during the preparation of plans. These requirements concern, for example, the *cooperation between Member States* and third countries, the treatment of *interactions between sea and land*, taking into account the impacts on the marine environment, economy and social sector during the in the preparation of maritime plans.

At the same time with the preparation of Hiiu and Pärnu maritime plans and the adoption of the directive, the preparation of a *new Planning Act* took place in Estonia. Based on the experience gained from the preparation of first maritime plans, and taking into account the requirements of the directive, the new Planning Act introduced for the first time *the regulation of maritime planning*. According to the new regulation, MSP shall be prepared as a thematic *plan covering the entire Estonian marine area*, and the preparation of this plan is organised by the Ministry of Finance.

5.1 Legal regulations

Maritime spatial planning is governed by the *Planning Act* (hereinafter: PA). Pursuant to Article 13, section 2 of the PA, a national spatial plan may be prepared as a thematic spatial plan that extends to marine areas, the adjacent coastal areas and also the exclusive economic zone. This is the first time when the Planning Act provides for a regulation meant only for maritime planning.

In addition to that, the Planning Act also provides the *main functions* maritime spatial planning must address, *rules for the establishment of the process* and *carrying out SEA*.

First, Article 13, section 3 of the PA establishes that the aim of the national spatial plan is to define the principles and directions of the spatial development of Estonia. Thus, according to the Planning Act, the objective of maritime plan is to identify the *spatial development* principles and trends of the national maritime area, i.e. the territorial sea and economic zone and coastal areas. The development principles are set out by the functions of maritime spatial plans pursuant to Article 14, section 2 of the PA. These include, among other things, the determination of the measures required for the protection of marine environment, the determination of measures to ensure the functioning of fisheries, the determination of the location and general building conditions of construction works that do not have a permanent connection to the shore, etc. With the *functions set* for MSP, a long-term plan for the use of maritime space is created both with regard to the territorial sea as well as the economic zone, which takes into account the economic, social, cultural and environmental needs in a balanced manner. In order to identify and balance the needs and interests, it is necessary to *cooperate* during maritime spatial planning and involve different authorities, county governments, local governments, local communities and sectoral stakeholders.

The body organising the preparation of MSP is the *Ministry of Finance* and the proceedings shall be subject to national planning standards. This means that planning is initiated and established by the *Government of the Republic*, which enables the MSP to assign duties and conditions to other public authorities for issuing different permits needed for using different sectors of the maritime area (e.g. the building permit or other).

MSP does not automatically give the permission to carry out all activities planned in it. The introduction of the plan takes place *through various instruments regulating the use of the marine area* – for example, authorisation procedures (including the granting of a building permit), the process of forming nature conservation areas, the SEA and EIA, etc. The function of MSP is to set out the duties and conditions that must be considered in the various procedures by different institutions while allowing the use of the sea, in order to ensure the sustainable use of the marine area.

The most obvious connection is the *connection between MSP* and the building permit granting procedure for *the construction of buildings that do not have a permanent connection to the shore*. Firstly, the initiation of the building permit granting procedure is related to the preparation of a MSP. Namely, Article 22^{8} of the Water Act provides that the competent authority shall refuse to commence proceedings on granting a building permit, if the *drawing up of a spatial plan has been initiated* and the planning proceedings have not been completed. Consequently, it is not possible to commence proceedings on granting a building permit if the preparation of MSP has not been completed. However, if the proceedings on granting a building permit have been commenced after the establishment of MSP, Article 22^{10}, section 1, subsection 3 of the Water Act shall be applied, according to which the authority shall refuse to commence proceedings on granting a building permit if the conditions of the building permit applied for *are contrary to an applicable spatial plan*. Thus, the proceedings on granting a building permit and the preparation of MSP or the conditions laid down by the established plan are closely related.

Similarly, to the building permit granting procedure, other procedures permitting the use of the maritime area, for example, the planning of fairways, the determination of dumping areas, etc., must take into account the conditions set out in the established plan by the Government of the Republic. *In order to improve the coherence of procedures, it may be necessary, in the future, to amend various legal acts allowing the use of maritime space.*

5.2 Hiiu and Pärnu MSPs

In October 2012, the Government of the Republic initiated the preparation of maritime spatial plans in the areas of the territorial sea that are adjacent to Hiiu and Pärnu counties (Figure 2). The purpose of the preparation of the county plans was to carry out for the first time in Estonia, through the planning process arising from the Planning Act, the planning of marine area and to identify the prospective use of the marine area and the necessary conditions for such use. County plans created the basis for planning of the rest of Estonian marine areas.

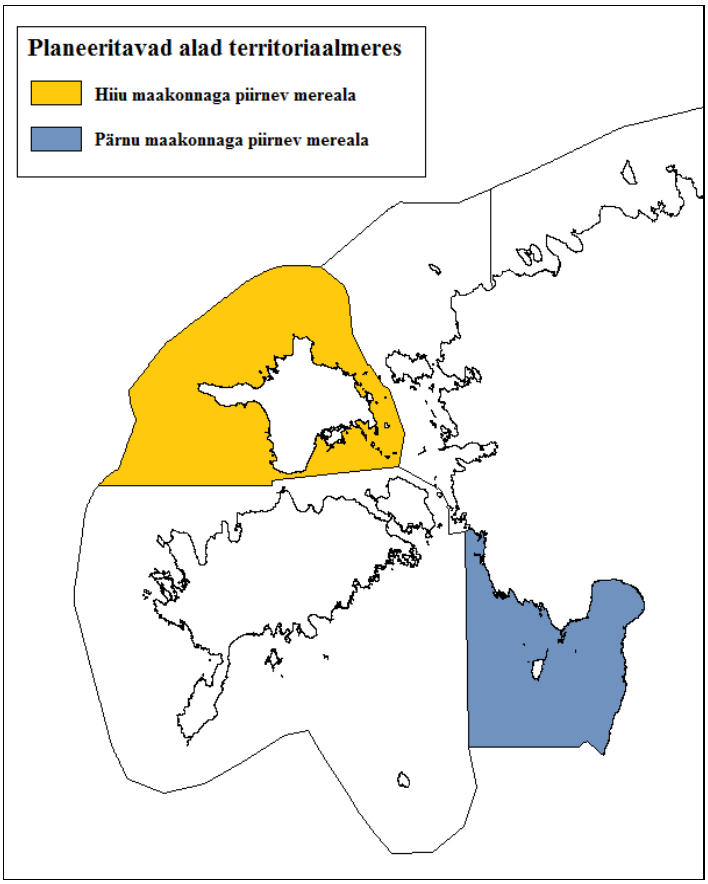

Figure 2. Hiiu and Pärnu maritime planning areas.

Hiiu MSP[23] was adopted in June 2016 and Pärnu MSP was introduced in April 2017. These plans will remain valid after the introduction of a national MSP, which means that those planning solutions shall continue serving as the basis for decisions regulating the use of marine areas in those regions.

The preparation of the national MSP *must take into account the already prepared Hiiu and Pärnu maritime spatial plans*, including concerning the areas envisaged for various uses and their conditions of use.

[23] Offshore wind energy theme in Hiiu MSP is abolished by the National Court of Estonia on August 8th 2018, all other themes in Hiiu MSP are still legally binding

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