Estonian Marine Strategy Programme of Measures 2022-2027

Short summary

In accordance with the EU Marine Strategy Framework Directive (MSRD, 2008/56/EC), a Programme of Measures (PoM) was compiled in 2016, the goal of which was to achieve or maintain the good environmental status of Estonian marine areas by 2020. It was necessary to develop an updated PoM and implement it from 2022, because the good environmental status of the Estonian marine area and the environmental targets have not been achieved.

In order to compile and establish an updated PoM, the current state of the environmental conditions of the Estonian sea area, the pressures and human activities affecting the environmental conditions, the predicted changes in pressures and the effectiveness and sufficiency of the existing measures have been analysed.

The main environmental problems in the Estonian sea area and the pressures causing them and related human activities are:

- Eutrophication excessive input of nutrients, mainly from land via rivers, nitrogen also via air; human activities are agriculture, transport, industry, waste treatment;
- Hazardous substances mainly from land via rivers and the atmosphere (locally also direct
 inputs); from industry, transport, everyday life, the risk of marine pollution from shipping;
- Fishing fishing, including overfishing, bycatch;
- Non-indigenous species mainly from shipping;
- Habitats disturbance and loss mainly the construction and use of transport and other infrastructure (development of ports, mining, dredging and dumping, offshore facilities);
- Marine litter mainly from land, via rivers, rainwater, waste water, but also recreation, shipping, fishing;
- Underwater noise mainly shipping, infrastructure construction.

Based on the performed analysis and conducted consultations, a list of measures for the new period 2022-2027 has been compiled (Table 1). The technical feasibility, cost and efficiency of the measures to achieve environmental targets and good environmental status, as well as the sufficiency of the measures, have been analysed. The analysis has been carried out in nine marine strategy areas – D1&D4 Biodiversity and food webs; D2 Non-indigenous species; D3 Fisheries; D5 Eutrophication; D6 Seabed integrity; D7 Hydrographic changes; D8&D9 Hazardous substances; D10 Marine litter; D11 Underwater noise. The detailed analysis results are presented by specified subject areas in the published reports. In addition to the PoM of Estonian marine strategy, the action program of water management plans for the period 2022-2027 has been taken into account, especially in the area of eutrophication and hazardous substances, where the main pressure comes from human activities on land (agriculture, industry, transport).

An analysis of the socio-economic impact of the measures and a strategic environmental impact assessment have been carried out. If, as a result of the sufficiency analysis, the conclusion has been reached that the environmental targets or the good environmental status of the marine area cannot be achieved by 2030, then the corresponding exceptions are justified. In order to fill the gaps in knowledge, a list of necessary studies has been proposed, their descriptions have been compiled and the costs of the studies has been assessed.

The total cost of the PoM of the Estonian marine strategy in the period 2022-2027 is estimated at EUR 46,335,000. The cost of the planned research program is EUR 6,440,000. Exceptions in terms of non-achievement of good environmental status and/or environmental targets are suggested in the

areas of eutrophication, hazardous substances and biodiversity (in terms of the abundance and distribution of ringed seals) due to the natural characteristics of the Baltic Sea (enclosed sea area, long residence time) and climate change (reduction of ice cover).

Table 1. Programme of measures of the Estonian marine strategy 2022-2027.

Nr	Code	Title of measures	GES descriptor
1	BALEE-M017	Improving the effectiveness of the existing network of marine protected areas	D1, D4, D6
2	BALEE-M020	Improving the condition of fish spawning areas and migration routes, stimulating populations and updating protection measures	D1, D3, D4
3	BALEE-M021	Applying technologies to reduce and prevent bycatch for the protection of Baltic Sea species	D1, D3
4	BALEE-M026	Reducing fishing efforts to GES level and development and implementation of the corresponding concept	D3
5	BALEE-M032	Developing compensatory measures for disturbing or destroying the integrity of the seabed	D6
6	BALEE - M035	Preparing and implementing minimum requirements for EIA and impact monitoring of blue economy development projects	D6, D1, D2, D3, D4, D5, D7, D8, D11
7	BALEE-M036	Construction of the openings of the dam in Väike Väin to improve water exchange and to open the strait as a fish migration route	D7, D1, D3
8	BALEE-M039	Enhancing the management of hazardous pharmaceutical waste and raising awareness of environmentally friendly disposal of pharmaceuticals	D8, D9
9	BALEE-M040	Increasing pollution response capacity through the design and construction of a new buoy and research vessel with pollution control abilities (oil and other hazardous chemicals)	D8, D1-D11
10	BALEE-M046	Litter collection campaigns	D10, D6
11	BALEE-M047	Environmentally friendly waste management on beaches and coasts with flood risk	D10
12	BALEE-M051	Treatment of stormwater and wastewater to reduce the amounts of microplastics	D10, D8
13	BALEE-M053	Reducing the input of tire debris	D10
14	BALEE-M055	Implementation of the HELCOM regional action plan on underwater noise and necessary regulations in Estonia	D11, D1
15	BALEE-M056	Management of marine data, improvement of data exchange and availability of environmental data, including the development of relevant services	
16	BALEE-M057	Updating the regulations	D1-D11
17	BALEE-M058	Participation in international cooperation in the field of marine environmental protection	D1-D11
18	BALEE-M059	Informing and involving stakeholders in marine environment protection activities	D1-D11
19	BALEE-M076	Changing hydromorphological conditions for local improvement of	
20	BALEE-M079	Ensuring environmental safety of shipping	D8, D5, D2, D10
21	BALEE-M002- 02	Preventing a potential increase of hazardous substances input from marine aquaculture	D8, D9