

Estonian Marine Strategy Programme of Measures (updated in 2023)

Summary

In accordance with the EU Marine Strategy Framework Directive (MSRD, 2008/56/EC), Estonian Marine Strategy Programme of Measures (PoM) was compiled in 2016 with a goal to achieve or maintain the good environmental status of Estonian marine area by 2020. It was necessary to update the PoM and continue its implementation during 2022-2027, because the good environmental status of the Estonian marine area and environmental targets have not been achieved yet. The updated PoM was adopted by the Minister of the Environment on 22.02.2023 with his Decree No [16-7/23/5](#).

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 Estonian sea area and main 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 (locally also direct inputs) and atmospheric deposition; 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 new measures for the 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, was analysed. The analysis has been carried out for nine marine strategy descriptors – 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 Estonian only). In addition to the updated PoM of Estonian marine strategy and its previous ongoing measures (Table 2), the measures and actions under WFD Water Management Plans for the period 2022-2027 have 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, corresponding exceptions are justified. To fill in the gaps of knowledge, a list of necessary studies has been proposed, their descriptions have been compiled and the cost of research needs has been assessed.

The total cost of the PoM of the Estonian marine strategy during 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. New measures of the Estonian Marine Strategy Programme of Measures (2022-2027)

No	Code	Title of a measure	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) and ensuring the comprehensive development of pollution response	D8, D1-D11
10	BALEE-M046	Litter clean-up campaigns (incl. raising awareness on marine litter impacts)	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	D1-D11
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 environmental status	D5, D7
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

Table 2. Ongoing and continuing measures from the first PoM

No	Code	Title of a measure	GES descriptor
22	BALEE-M001	Developing a network of MPAs in the Estonian EEZ	D1, D4, D6
23	BALEE-M003	Increasing knowledge on non-indigenous species to control their spread	D2
24	BALEE-M004	Ratification and implementation of the International Convention for the Control and Management of Ships Ballast Water and Sediments (BWMC), and participating in the regional information system	D2
25	BALEE-M005	Developing regional fishing restrictions and updating the size limits of commercial fish	D1, D3, D4
26	BALEE-M006	Supporting the marketing/the use of limited value fish	D2, D3
27	BALEE-M007	Adjusting the fishing effort not to compromise achieving GES	D3
28	BALEE-M009	Creating the readiness to use liquefied natural gas (LNG) as ship fuel	D5
29	BALEE-M010	Management of direct discharges of stormwater to minimise the load of nutrients, contaminants and litter	D5, D8, D9, D10
30	BALEE-M012	Managing environmental risks accompanying bunkering at sea	D8, D9
31	BALEE-M013	Pilot study analysing the organisation of marine litter reception, including abandoned fishing gear, in ports and preparing an action plan	D10
32	BALEE-M015	Addressing the topic of marine litter in the National Waste Management Plan and in the waste management plans of local authorities in the coastal area	D10
33	BALEE-M016	Developing a registry of impulsive sounds	D11