



Estonian Marine Strategy's Programme of Measures to achieve and maintain Good Environmental Status of Estonian marine area

Strategic Environmental Assessment (SEA) programme (draft 15.06.2015)

Customers: Estonian Environmental Research Centre Ministry of Economic Affairs and Communications

SEA compilers: LCC Alkranel Marine Systems Institute at Tallinn University of Technology

Head of the SEA expert group: Alar Noorvee

Tartu-Tallinn 2015

Programme of Measures to achieve and maintain good environmental status of Estonian marine area SEA programme. 2015

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1. General

According to the Directive 2001/42/EC - Assessment of the effects of certain plans and programmes on the environment and the Estonian Environmental Impact Assessment and Environmental Management System Act stipulate the need for Strategic Environmental Assessment of strategic plans and programmes.

Strategic Environmental Assessment (SEA) programme is a document, where the planned actions of the strategic document are described, the subject, content and extent of the SEA is determined and the methods, activities and timetable of the SEA are described. The SEA programme is source document for conducting the SEA process and drawing up the SEA report.

2. Subject and extent of the Strategic Environmental Assessment (SEA)

The subject of the SEA is the Estonian Marine Strategy's Programme of Measures to achieve and maintain good environmental status of Estonian marine area and the National Development Plan "Estonian Marine Policy 2012-2020", to assess consensus between the Marine Policy and Programme of Measures. Specifically, the subject of the SEA are the new measures put together when drawing up the draft of Estonian Marine Strategy's Programme of Measures.

The SEA is initiated on the 8th of April 2015 with the decree of the Estonian Ministry of Environment No 342.

The aim of the Programme of Measures is to develop measures which need to be taken into use to achieve or maintain good environmental status of Estonian marine area and to reach the environmental targets established. The cost-effectiveness and the technical feasibility of the developed measures have to be ensured. That also includes assessing the impacts, as well conducting cost-benefit analysis before implementing every new measure. Likewise, the impact of the new measures developed in the Programme of Measures to the marine area outside the Estonian marine area has to be taken into account to minimize possible negative impacts or, if possible, to amplify positive impacts to the marine waters in question.

The extent of the SEA covers the impact assessment of the new measures developed in the Programme of Measures and the aims and measures set in the National Development Plan "Estonian Marine Policy 2012-2020". Since the SEA is conducted for a strategic document, the impacts are assessed also on a more general strategic level.

3. Short description of the Estonian Marine Strategy's Programme of Measures to achieve and maintain good environmental status of Estonian marine area and of the National Development Plan "Estonian Marine Policy 2012-2020"

3.1. Short description of the Programme of Measures

The major pressure to the ecosystems of the Baltic Sea is brought on by the human activities in the catchment areas and maritime area. Therefore, it is important to define the Good Environmental Status (GES) of the maritime area, to assess the current environmental status of the maritime area and to develop a plan how to achieve or maintain the GES to advance the conservation of the marine ecosystems and ensure the sustainable management of marine waters.

The Marine Strategy Framework Directive (2008/56/EC; MSFD) sets each Member State following requirements: to conduct the initial assessment of the current environmental status of their marine waters (Article 8); to determine Good Environmental Status (GES) characteristics for their marine waters (Article 9); to establish environmental targets and associated indicators for their marine waters to achieve GES (Article 10); to establish a monitoring programme for the ongoing assessment of targets (Article 11); to develop the most important part of the Marine Strategy - a programme of measures designed to achieve or maintain GES (Article 13);

The full establishment of the Programme of Measures requires beforehand the completion of profound and time and resources consuming intermediate stages. These stages include: determining the quantitative relationships between pressure factors and environmental status; mapping the general pressure factors (including pollution sources), with the ability to regulate those pressure factors, which currently influence the marine ecosystems; drawing up the list of planned measures; the socio-economic analysis of the planned measures to determine their possible impacts; involving the public and interest groups in the discussions; international cooperation and coordination etc.

The marine ecosystems are influenced by the processes and impact factors on land, as well as in the Baltic Sea. The most important of them are human activities. The Marine Strategy Framework Directive (MSFD) sets a target for maintaining or achieving good environmental status in the marine environment by 2020, which can be achieved with different measures in different Member States. Each Member State has to develop and implement their own marine strategy to promote the sustainable management of the marine area and preserve marine ecosystems.

The schedule of the preparatory actions of the marine strategy is following:

- 1) 15^{th} of July 2012:
- a. The initial assessment of the current environmental status of national marine waters and the environmental impact and socio-economic analysis of human activities in these waters (MSFD Article 8);
- b. The determination of GES for national marine waters (MSFD Article 9);

- c. The establishment of environmental targets and associated indicators to achieve GES (MSFD Article 10)
- 2) 15th of July 2014:
- a. The establishment of a monitoring programme for the ongoing assessment and the regular update of targets (MSFD Article 11).
- 3) By 2015
- a. The development of the Programme of Measures designed to achieve or maintain GES (MSFD Article 13).
- 4) By 2016
- a. The application of the Programme of Measures.

The directive points out 11 (eleven) qualitative characteristics or themes for good environmental status, based on which the marine environmental status is assess and the targets are set: biological diversity, non-indigenous species, fisheries, marine food webs, eutrophication, sea-floor distraction, change of hydrological conditions, concentrations of contaminants in water, contaminants in seafood, marine litter and underwater noise and energy.

The first stage of Estonian marine strategy (action No 1: MSFD actions due date 2012) were finished in September 2012: The initial assessment of the current environmental status of Estonian marine waters was conducted, Good Environmental Status (GES) for Estonian marine waters was determined and environmental targets and associated indicators to achieve GES were established.

For supporting the implementation of MSFD Estonia took part in cooperation with partners from Finland and Latvia in the project "Good Environmental Status of the Baltic Sea through Regional Coordination and Capacity Building" (GES-REG1) in 2011-2013. The project included among other things:

- 1. The analysis of initial assessments of the current environmental status of marine waters was conducted and suggestions were made to harmonize the assessment schemes between the participating states;
- 2. The indicators, on which the assessment methods of Good Environmental Status (GES) characteristics can be based focusing on non-indigenous species, marine food webs, marine litter and underwater noise, were proposed;
- 3. A proposal for the elaboration of the joint monitoring network was made, to determine the monitoring locations near the sea border, where the participating states can cooperate on monitoring frequency, instruments and data analysis and therefore manage the monitoring more cost effectively.

The integrated monitoring programme was put together in 2014. The integrated monitoring programme includes all the characteristics of GES, is harmonized with the neighbouring countries with shared marine areas and is cost-effective. Likewise, suggestions were made to update the environmental targets proposed in 2012. The Programme of Measures is under development – the existing measures are mapped and a preliminary list of new measures is proposed.

The current SEA concentrates on the assessment of the new measures developed for the Programme of Measures. The preliminary new measures developed for the draft of the Programme of Measures are presented in Annex 1 of the SEA programme (the measures may be specified during the further draw-up of the Programme of Measures).

3.2. Short description of the development plan

The National Development Plan "Estonian Marine Policy 2012-2020" is a cross-sector development plan, which summarises the strategic objectives and activities for contributing to the development of marine sector.

Since the development plan is a cross-sector development plan, it relates to many other development plans and strategic planning documents. At the same time, the development plan attempts to avoid repeating of other documents and therefore the development plan gives in most subjects general directions for further activities and specific measures and actions are brought out in sector documents.

The goal of the development plan is to develop benchmarks for the advance of Estonian marine sector to realise maximally the potential of the use and maintenance of Estonia's marine resources. In Estonia a big proportion of the economy depends of the marine sector, since approximately 60% of Estonian export takes place via marine routs. On the other hand, the openness to the sea makes it possible to earn income from international carriage of goods, tourism and fishery. This is only possible, if the business directly connected with the marine sector is supported effectively by public services, legal regulation, workforce with good preparation, the high level of skills and knowledge and cooperation between different market players.

In addition to the business activities the marine activities influence the living environment of the people and on the other hand, human activities influence the marine environment. Accordingly, in cooperation with marine business activities, the issues of the living environment, regional development and environmental protection have to be taken into account.

Although, many of the marine sectors perform already effectively, the whole potential of the marine sector is not employed. To maximise the whole potential, the development plan is based on the assumption that all the issues regarding the marine sector are interconnected, support each other and have to be considered as a whole. The implementation of the development plan should generate a state, where the value added to the marine business activities has increased, additional possibilities for small-businesses are created, the living environment at and near the coast is attractive and favours people staying at the coastal regions, the load to the environment is decreased and accidents on sea and harbours are diminished.

The marine sector vision of the National Development Plan "Estonian Marine Policy 2012-2020" foresees following: Estonian marine sector has high value-added, attractive and sustainable economy, which secures the preservation of marine environment and promotes the development of coastal living environment and way of life.

According to the vision operate in the marine sector internationally successful big-enterprises as well as small-enterprises that contribute to the local development. The enterprises in

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marine sector are modern and have high value-added economy, they ensure profitable transport routes for Estonian international trade and increase the competitiveness of Estonia as a transport route. The products and services of the marine sector are attractive and increase the reputation of Estonian economy and tourism.

The environmental load of the marine sector is decreased, the seafaring safety is increased and the number of accidents declined. Due to the improvement of the infrastructure and the development of small-enterprises the coastal area and islands are attractive living areas. The marine cultural heritage is preserved and actively presented.

The Development Plan "Estonian Marine Policy 2012-2020" has set following priorities and objectives for promoting the marine sector:

- 1) PRIORITY 1 The marine business environment is business friendly and internationally competitive.
 - Objective 1 Estonian shipping is internationally competitive.
 - Objective 2 Trade flows through Estonian harbours are increased.
 - Objective 3 The passenger numbers on international shipping lines are increased.
 - Objective 4 Estonian shipbuilding and repair are internationally competitive.
- 2) PRIORITY 2 The marine sector is secure, safe and the state of the marine environment has improved.
 - Objective 5 The safety and security in vessel traffic and harbours has improved.
 - Objective 6 The state of the marine environment has improved.
- 3) PRIORITY 3 The actions of the public sector support marine development.
 Objective 7 The marine management and marine regulations are more effective
- 4) PRIORITY 4 Estonian marine education and research and development are up to date.
 - Objective 8 Estonian education system provides modern training in balanced volume of specialists necessary for all fields of the marine sector.
 - Objective 9 The quantity and quality of Estonian marine research have increased.
- 5) PRIORITY 5 The coastal living and visit environment are attractive, favouring marine tourism and local business development, the marine cultural heritage is carried forward.
 - Objective 10 Marine tourism and marine and coastal business activities are developed.
 - Objective 11 The preservation of marine cultural heritage and traditions is secured.

4. The objective of SEA and the possible environmental impacts of the strategic planning document

According to the Estonian Environmental Impact Assessment and Environmental Management System Act §33 strategic environmental assessment (SEA) is mandatory if with a strategic planning document activities, which are likely to have a significant environmental impact, are proposed.

According to the Estonian Environmental Impact Assessment and Environmental Management System Act §2 subsection 2 the purpose of SEA is to: 1) contribute to the integration of environmental considerations into the preparation and adoption of strategic planning documents; 2) provide for a high level of protection of the environment; 3) promote sustainable development.

The SEA and the assessment of the environmental impacts of a strategic document gives the person who adopts the strategic planning document necessary information what the adoption of the strategic document can involve. The objective of the current SEA is to give the preparer of the Programme of Measures information about the environmental impacts of the planned measures.

Additional objectives of the current SEA are:

- To explain, describe and assess the significant strategic environmental impacts of the new measures developed for the Estonians Marine Strategy's Programme of Measures and to bring out measures for mitigation or/and avoiding of negative impacts or increasing of positive impacts;
- 2) To evaluate the internal accordance of the new measures developed for the Programme of Measures and to analyse the compliance of the new measures with environmental objectives of other relevant Estonian and international strategic documents.
- 3) To describe the monitoring activities and measurable indicators for identifying the significant environmental impacts resulting from the implementation of the new measures.
- 4) To explain, describe and assess the significant strategic environmental impacts of the objectives and measures set in the development plan "Estonian Marine Policy 2012-2020" and to bring out measures for mitigation or/and avoiding of negative impacts or increasing of positive impacts.
- 5) To evaluate the internal accordance of the objectives and measures set in the development plan "Estonian Marine Policy 2012-2020" and to analyse the compliance of the measures with environmental objectives of other relevant Estonian and international strategic documents.
- 6) To describe the monitoring activities and measurable indicators for identifying the significant environmental impacts resulting from the implementation of the development plan "Estonian Marine Policy 2012-2020".
- 7) To involve different interest groups to the compilation of the SEA report and receiving feedback from different interest groups, which can be taken into consideration in the SEA programme and report.

Possible environmental impacts of the Programme of Measures and the development plan "Estonian Marine Policy 2012-2020", which are analysed and assessed during the SEA process, are following:

The assessment of possible impacts on the natural environment (including aquatic environment, atmosphere, sea-floor and sea coast):

- Impacts on the marine biota and habitats (including protected natural objects);
- Impacts on the marine water quality and physical properties;
- Impacts on air quality and climatic changes;
- Impacts of the use of natural and other resources.

The assessment of possible impacts on the socio-economic environment:

- Impacts on the well-being and health of humans
- Impacts on the marine business activities (incl. fisheries, aquaculture, tourism etc);
- Impacts on the marine transport and harbours (incl. safety of seafaring);
- Impacts on the marine cultural heritage.

Taken into account current information, with the implementation of the Programme of Measures and the development plan "Estonian Marine Policy 2012-2020", transboundary environmental impacts may result. Taken this into account, neighbour countries like Finland, Sweden and Latvia, must be informed by the Ministry of Environment of Estonia about the initiation of the SEA and of further possible consultations. The SEA programme will be transmitted to the corresponding authorities of Finland, Sweden and Latvia.

The spectrum of subjects may widen if new and significant information reveals.

5. The methods of assessment

The subject of the SEA are the new measures put together when drawing up the draft of Estonian Marine Strategy's Programme of Measures and the development plan "Estonian Marine Policy 2012-2020".

The SEA is conducted according to the Estonian Environmental Impact Assessment and Environmental Management System Act and relevant guidance materials. In the SEA the significant impacts (negative and positive) of the strategic planning document, that are likely to occur, are assessed. Environmental impact is significantly negative if it may potentially exceed the environmental capacity of a site, cause irreversible changes in the environment; endanger health, well-being, cultural heritage or property of human. Environmental impact is significantly positive if it decreases the environmental load of a site or area (for example the reduction of environmental pollution or the use of natural resources) or measures are taken, which ensure the preservation or improvement of the environmental status of natural areas, provide the improvement of human health and well-being and secure the preservation of cultural heritage or property.

The SEA uses two main methodical approaches: compliance analysis and environmental impact analysis.

The compliance analysis investigates how are the new measures of the Programme of Measures in compliance with objectives of other relevant Estonian and international strategic documents of European Union.

In the compliance analysis the compliance of the new measures with the aims of the following strategic documents is assessed:

- HELCOM Baltic Sea Action Plan;
- National Development Plan "Estonian Marine Policy 2012-2020";
- Estonian Water Management Plans;
- National Strategy "Sustainable Estonia 21";
- Estonian Environmental Strategy 2030;
- Nature Conservation Development Plan 2020;
- Estonian Fisheries Strategy 2014–2020;
- Recreational Fishing Development Plan 2010 -2013;
- The Estonian Implementation Plan of the Baltic Sea Action Plan 2012-2015;
- National Programme for Reduction of Emissions of Phenols to Water for 2004-2014;
- National Waste Management Plan 2014-2020;
- Development Strategy of Estonian Aquaculture Sector for 2014-2020;
- Estonian Rural Development Plan 2014–2020;
- National Tourism Development Plan 2014–2020;
- National Transport Development Plan 2014-2020
- National Spatial Plan "Estonia 2030+".

By conducting the SEA among others the following legal documents are taken into consideration:

- Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 Assessment of the effects of certain plans and programmes on the environment;
- Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment;
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive);
- Commission Decision of 1 September 2010 on criteria and methodological standards on good environmental status of marine waters (2010/477/EU);
- 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;
- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora;
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds;
- Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy;
- Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment;
- Council Directive *91/676/EEC* of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources;

- Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants;
- Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy;
- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control);
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products;
- Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements;
- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives;
- Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues;
- Directive 2009/123/EC of the European Parliament and of the Council of 21 October 2009 amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements;
- Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC.

The impact analysis is an approach that assesses the planned measures in the spectrum of different impacts. In the impact analysis an overview of the current situation and main problems in the domain of the current strategic planning document is given. Likewise, the impact analysis covers which natural and socio-economic environmental fields and to what extent are influenced by the planned measures and actions of the strategic planning document. If necessary, suggestions are made to change the plan (Programme of Measures) regarding the environmental aspects to mitigate negative effects and to amplify positive effects.

In the impact analysis the impacts are mainly assessed qualitatively (descriptively) in relation to the different fields of natural and socio-economic environment (look chapter 4). Essentially, the analysis is based mainly on the assessment how the Programme of Measures contributes to the achievement of the environmental targets set in the report conducted by the University of Tartu Estonian Marine Institute in 2012 *Environmental Indicators and Targets for Achieving Good Environmental Status in Estonian Marine Waters* and in the report conducted by the Marine Systems Institute at Tallinn University of Technology in 2014 *Marine Monitoring Programme*.

If possible, the impacts to different environmental fields are also assessed quantitatively. Taking into account the strategic scale of the Programme of Measures and that there is not always enough detailed information about the effects of planned measures, quantitative assessment can be difficult. Therefore, it is in many fields impossible to make quantitative assessments. The impacts are generally assessed as short term and long term impacts.

Since the SEA follows the strategic definition of the strategic planning document, the impacts are assessed in the more general level point of view than for example for detailed plans or

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development consents. No further research or studies are conducted for the SEA. The SEA will be based on the existing data.

Due to the strategic stage of the Programme of Measures the assessment of cumulative impacts is important in the SEA, because cumulative effects may have a significant proportion in the overall spectrum of impacts. Cumulative impacts will be assessed after the impact analysis is composed.

The SEA report deals in addition with:

- The description of the objectives and aims of the Programme of Measures and measures for achieving the objectives;
- The description of the objectives and measures set in the development plan "Estonian Marine Policy 2012-2020"
- An overview of the results of the initial assessment of the current environmental status of Estonian marine waters and main problems will be presented. Basically, the overview of the current situation is given;
- A short overview of the current situation in Estonian marine sector will be presented based on the development plan "Estonian Marine Policy 2012-2020".
- A synopsis of the environmental targets and associated indicators set for Estonian marine waters to achieve GES is given;
- If needed, suggestions will be made to improve the Programme of Measures regarding environmental aspects, which have not obtained enough coverage.
- If necessary, suggestions will be made to the next implementation plan of the development plan "Estonian Marine Policy 2012-2020".

6. Interested persons and authorities

Persons and authorities who can be affected by the measures and actions developed in the strategic planning document or who can have valid interests against the strategic planning document are presented in Table 1.

Table 1. Persons and authorities who can be affected by the measures and actions developed in the strategic planning document or who can have valid interests against the strategic planning document

Person or Authority	Impact and/or interest	Informed according to Estonian Environmental Impact Assessment and Environmental Management System Act §37 subsection 1
Estonian Ministry of	Initiator and establisher of	Via e-mail
Environment	the Programme of Measures	
Estonian Ministry of Economic	Harbors, maritime affairs in	Via e-mail
Affairs and Communications	general	
Estonian Ministry of Interior	Spatial planning of marine	Via e-mail
	areas	
Estonian Ministry of Agriculture	Fishery, food safety,	Via e-mail
	agricultural impacts	
Estonian Ministry of Education	Research and development in	Via e-mail

Person or Authority	Impact and/or interest	Informed according to Estonian Environmental Impact Assessment and Environmental Management System Act §37 subsection 1
and Research	problem solving, marine education	
Estonian Ministry of Social Affairs	Employment, bathing water quality	Via e-mail
Estonian Environmental Board	Protected natural objects	Via e-mail
Estonian Environmental Agency	Environmental monitoring	Via e-mail
Estonian Health Board	Healt safety (bathing water quaity)	Via e-mail
Estonian Waterways Board	Harbors, waterways	Via e-mail
Estonian Agricultural Board	Agricultural impacts, land reclamation and amelioration impacts	Via e-mail
Estonian Police and Border Guard Board	Sea rescue, organizing marine pollution discovery, location and cleaning	Via e-mail
Saare County Administration	Counties, which have a	Via e-mail
Lääne County Administration	marine coastline	Via e-mail
Hiiu County Administration		Via e-mail
Harju County Administration		Via e-mail
Lääne-Viru County Administration		Via e-mail
Ida-Viru County Administration		Via e-mail
Pärnu County Administration		Via e-mail
Local authorities, which have a marine coastline	The Progamme of Measures may influence them	Via e-mail
Estonian Ports Association	Harbors	Via e-mail
Estonian Shipownery Association	Marine transport	Via e-mail
Association Of Estonian Deck Officers		Via e-mail
Estonian Council of Environmental NGOs	Improvement of environmental protection	Via e-mail
Estonian Fishermen's Association	Fishery	Via e-mail
Estonian Association of Fishery	Fishery	Via e-mail
The general public	Are interested in the high quality of the environment	Via public announcement in newspapers and in the website Ametlikud Teadaanded (Official Announcements).

The list of the interested persons and authorities can be complemented during the SEA process.

7. The schedule of the SEA process

The schedule of the SEA process is presented in Table 2.

Stages of the SEA	Timing schedule
Initiation of the SEA	08.04.2015
Collecting previous information and putting together the SEA programme	01.06.2015 - 05.06.2015
Asking the opinions of authorities regarding the SEA programme	08.06.2015 - 03.07.2015
If necessary, integrating the SEA programme according to the opinions submitted by the authorities and composing the answers regarding the opinions submitted	06.07.2015 - 08.07.2015
Organizing the public display and public consultation of the SEA programme	09.07.2015 - 10.07.2015
Public display of the SEA programme	13.07.2015 -27.07.2015
Public consultation of the SEA programme	27.07.2015
If needed, integrating the proposals and suggestions submitted during the public display and public discussion and submitting the SEA programme for approval	27.07.2015 - 28.07.2015
Approval of the SEA programme	28.07.2015 - 12.08.2015
Conducting the SEA report	12.08.2015 - 01.10.2015
Organizing the public display and public consultation of the SEA report	01.10.2015 - 02.10.2015
Public display of the SEA report	02.10.2015 - 22.10.2015
Public consultation of the SEA report	22.10.2015
If needed, integrating the proposals and suggestions submitted during the public display and public discussion and submitting the SEA report for approval	23.10.2013 - 26.10.2015
Approval of the SEA report	26.10.2015 - 24.11.2015.

Table 2. Schedule of the SEA process

8. Information about the person responsible for the preparation of the strategic planning document and its SEA, the person who establishes the strategic planning document, the supervisor of strategic environmental assessment and the SEA expert

The initiator and establisher of the	The supervisor of the SEA:
Programme of measures:	Estonian Ministry of Environment
Estonian Ministry of Environment	Narva mnt 7a
Narva mnt 7a	15172 Tallinn
15172 Tallinn	
	Contact person:
Contact person:	Maris Malva (Environmental Management
Agnes Villmann (Marine Environment	Department)
Department)	Phone: +327 626 0742
Phone: +327 626 2936	E-mail: maris.malva@envir.ee
E-mail: agnes.villmann@envir.ee	
The authority responsible for the	The composer of the Programme of
preparation of the Programme of	Measures:
Measures and its SEA:	Stockholm Environment Institute Tallinn
Estonian Environmental Research	Centre
Centre	Contact person: Sulev Nõmmann
Contact person:	Phone: +327 53311618
Marek Nurmik (Project manager)	E-mail: <u>sulev.nommann@seit.ee</u>
Phone: +327 555 47923	
E-mail: <u>marek.nurmik@klab.ee</u>	Estonian Marine Institute, University of
	Tartu
	Contact person: Georg Martin
	Phone: +327 6718936
	E-mail: georg.martin@ut.ee
	Marine Systems Institute at Tallinn
	University of Technology
	Contact person: Urmas Lips
	Phone: +327 6204304
	E-mail: urmas.lips@msi.ttu.ee
The initiator and establisher of the	The authority responsible for the
development plan:	preparation of the development plan
Republic of Estonia Government	Ministry of Economic Affairs and
Rahukohtu 3, 15161 Tallinn	Communications
Phone: +372 693 5555	Contact person: Toomas Haidak
E-mail: riigikantselei@riigikantselei.ee	Phone: +372 6256470
	E-mail: toomas.haidak@mkm.ee

SEA composers:		
Alkranel LCC	Marine Systems Institute at Tallinn	
Riia 15B, 51 010 Tartu	University of Technology	
Contact person:	Akadeemia tee 15a, 12618 Tallinn	
Alar Noorvee	Contact person: Taavi Liblik	
Phone: +327 736 6676; +372 5540579	Phone: +327 620 4315	
E-mail: <u>alar@alkranel.ee</u>	E-mail: <u>taavi.liblik@msi.ttu.ee</u>	

The SEA expert group:

- Alar Noorvee, Alkranel LCC, SEA expert, the head of the SEA expert group;
- Taavi Liblik, Marine Systems Institute at Tallinn University of Technology, senior researcher;
- Natalja Kolesova, Marine Systems Institute at Tallinn University of Technology, junior researcher;
- Elar Põldvere, Alkranel LCC environmental expert;
- Tanel Esperk, Alkranel LCC environmental specialist;
- Reet Kivisild, Alkranel LCC environmental specialist;
- Veljo Kabin, Alkranel LCC environmental specialist.

If necessary, additional experts will be involved in the SEA process.

The head of the expert group Alar Noorvee has the right to carry out the SEA process according to Estonian Environmental Impact Assessment and Environmental Management System Act §34 subsection 3, because he:

- Has more than ten years of professional experience in environmental impact assessment and strategic impact assessment. Has environmental consultation experience since 2000 and has conducted many strategic environmental assessments.
- Has acquired officially recognised higher education (PhD degree) in environmental engineering in the University of Tartu and has undergone training in strategic planning in extent of at least 80 hours and has passed the examination in the course at the University of Tartu *Local and Regional* development planning;
- Knows the principles of and procedure for strategic environmental assessment and the legislation concerning the assessment. Methodical guidelines that will be used in the SEA process:
 - European Commission's Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions" European Comission, 1999
 - o Therivel, R. "Strategic Environmental Assessment in Action" London, 2004.
 - "Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents" Office of Deputy Prime Minister, London 2005.
 - Commission's Guidance on the implementation of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment.

9. Asking the opinion of the authorities

The SEA expert group and the authority responsible for the preparation of the Programme of Measures ask the opinion regarding the content of the SEA programme of the following authorities (via e-mail):

- Estonian Ministry of Environment;
- Estonian Ministry of Economic Affairs and Communications;
- Estonian Ministry of Interior;
- Estonian Ministry of Agriculture;
- Estonian Ministry of Education and Research;
- Estonian Ministry of Social Affairs;
- Estonian Environmental Board;
- Estonian Waterways Board.

The SEA programme was drawn up in cooperation with the expert group by:

Alar Noorvee Alkranel LCC Adress: Riia 15B, 51010 Tartu, Estonia Mobile phone: +372 55 40 579 Phone: +372 7 366 676 E-mail: <u>alar@alkranel.ee</u> ANNEXES OF THE SEA PROGRAMME

Annex 1. The preliminary new measures developed for the draft of the Estonian Marine Strategy's Programme of Measures

No	Measure	Short description of the measure
1	The establishment of marine protected area network in the <i>exclusive economic zone (EEZ)</i>	Based on previous and new proposals a marine protected area network in the Estonian EEZ will be established and management plans of the protected areas will be put together.
		i) The analysis of existing inventory and modelling results
		ii) Conducting additional research (modelling and fieldwork in selected areas)
		iii) Preparation of the proposal for the location of protected areas and objectives of protection (with concrete objectives of protection and protection measures)
		iv) The approval of management plans of the protected areas (potentially 2 areas: west of Vilsandi island, north-west of Hiiumaa island – shallow areas)
		v) The management of protected areas – marking on marine charts, periodic assessment of environmental status (monitoring after every 6 years)
		vi) Seminars, presentations, information days, radio/TV interviews for informing the public
		vii) Ensuring supervision in the protected areas.
2	Development and implementation of management plan for ringed	The management plan for ringed seal will be accepted and implemented
	seal	i) The analysis of the prepared management plan ii) Public display
		iii) Acceptanceiv) Implementation
		v) Protecting the habitats of ringed seal and
		establishing specific protected areas, reducing the impacts of fishing and poaching, monitoring of the
		population of ringed seal, supervision in protected
		areas, when ringed seals use the habitat mostly. vi) Informing the public of ringed seal biology –

		populaar science books, radio/TV broadcasts
3	Development of regional plans for aquaculture	Establishing sustainable conditions for growth in aquaculture production, improving spatial planning for aquaculture, preventing conflicts between aquaculture and environment through the development of regional plans. i) Conducting regional studies of the possibilities of different aquaculture types and forms and possible environmental impacts. ii) Regional plans of aquaculture, which include recommendations and restrictions, will be put
		together. iii) EIA or SEA of the regional plans iv) The approval of the plans v) Seminars, presentations, information days, radio/TV interviews for informing the public about aquaculture
4	Development of communication and information strategy regarding the topic of non-indigenous species	Systematic information campaign regarding the topic of non-indigenous species, their spreading ways and threats for a broad range of interested groups (fishermen, aquaculture, ship-owners, local authorities etc) with the objective to reduce further risks and impacts.
		i) Collection and systemisation of informationii) Communicating the information to the public and interested groups
5	Ratification and implementation of Ballast Water Management Convention (BWMC)	 i) Ratification and implementation of the international Ballast Water Management Convention (BWMC) from 2004 in Estonia and in cooperation with other countries in the Baltic Sea area in HELCOM. ii) Taking part in the regional information system, which includes harbour studies, monitoring (incl. early warning system) and relevant information gathered during risk assessment, to help the implementation of MWMC. Action: submitting the national information to HELCOM iii) Adapting reasnoable exeptions A-3 and liberations A-4. Action: taking part in HELCOM ballast workgroup.

6	The development of new	Setting temporary fishing restrictions in the
·	fishing regulations /limitations	ecologically and biologically important areas for fish populations (mainly to protect spawning grounds and migration to the spawning grounds)
		 i) The ascertainment of fish populations, that need protection via fishing restrictions, of areas which are important to the populations and of periods that are important to the populations. ii) Putting together the implementation plan of spatial and temporal fishing restrictions. iii) Informing the interested groups and coordination
		with them (2-3 meetings with the interested groups).iv) Adopting the implementation plan.v) Supervision.
7	Development of measures to promote economic use of low valued fish	Developing a system (for example preferences, subsidies, start-up subsidies, research and development support) that makes possible the econimic use of nowadays practically worthless or low valued fish catched together with high valued fish and the use of the fishing industry residued.
		i) Ascertaining the percentage of high valued fish in commercial fishery.ii) Determining the optimal uses for low valued fish.iii) Coordination with interested groups (2-3 meetings with the interested groups).
		iv) Putting together the implementation plan.V) Informing the interested groups and coordination with them (2-3 meetings with the interested groups).vi) Adopting the implementation plan.vii) Administrating the implementation plan
8	Reducing of fishing capacity according the conditions of GES	Setting of quota for fishing capacity (commercial fishing quota by county, which is set every year by the Government) to assure GES.
		 i) Determining fish populations, which need the measure for assuring GES. ii) Putting together the implementation plan. iii) Informing the interested groups and coordination with them (2-3 meetings with the interested groups). vi) Adopting the implementation plan. v) Supervision.
9	Inventory and update of size limits for fish in commercial fishing	The size limits for fish in commercial fishing will be reassessed by fish species and if necessary new size limits will be set.
		i) Determining fish populations, which need the measure for assuring GES.ii) Putting together the implementation plan.

		iii) Informing the interested groups and coordination with them (2-3 meetings with the interested groups).iv) Adopting the implementation plan.v) Supervision.
10	Introduction of liquefied natural gas (LNG) as ship fuel.	Developing and promoting the use of LNG as ship fuel in the Baltic Sea region.
11	Stopping of dumping of sewage water from ships directly to the Baltic Sea, including establishing capacity of the wastewater intake from cruising ships in harbours	In every harbour that offers payable services has to be the capacity to receive wastewater from ships (including big cruising ships). This service enables to avoid unsatisfactory ship wastewater treatment and marine pollution regarding organic matter, nitrogen, phosphorus, synthetic cleaning agents (detergents), pathogenic microorganisms and litter from ship toilets.
		After implementing the measure every harbour has sufficient equipment to receive wastewater from different ships and forwarding the wastewater to wastewater treatment plants. The forwarding of wastewater is coordinated with local wastewater treatment plants.
12	Additional nutrient, hazardous substance and litter inflow reductions from stormwater directly to the sea – the construction of stormwater sewerage and treatment systems	The management of nutrient, hazardous substances (incl. oil products, detergents, antifreezing agents), suspended solids (plastic) and pathogenic microorganism's inflow through establishment or reconstruction of stormwater collection and treatment systems. Taking into account the experience of other countries regarding suitable and economic methods for stormwater management.
13	Measures to restrain high- speed vessel waves (restrictions, if impact reduction needed)	Measures to restrain high-speed vessel waves (restrictions, if impact reduction needed)
14	Organising public awareness programmes and community work regarding marine litter	Organising public awareness programmes and educational actions regarding marine litter. Organising litter collection in beaches and supporting litter collection programmes.
15	The implementation of pilot monitoring of microplastics (marine litter) and approval of further monitoring programme.	The implementation of pilot monitoring of microplastics (marine litter) and approval of further monitoring programme. Prior the monitoring of microplastics, studying the sources of microplastics and spread and environmental impacts of microplastics in the marine environment. Based on that the rationality of the monitoring is decided. Based on recommendations of HELCOM Baltic sea Action Plan on Marine Litter (BSAP ML).

16	Reducing the use of single use plastic bags and packaging, supporting relevant publicity and educational (public awareness) actions.	 Establishing and implementing measures for the reduction of the use of single use plastic bags and packaging. Adapting stricter requirements for the use of single use packaging at sea and coastal area (beaches, harbours, vessels), promoting the use of alternative environmental friendly packaging, improving waste management. Developing a system of preferences, subsidies and regulation for reducing waste production. MARPOL 73/78 International Convention for the Prevention of Pollution from Ships, Annex V Prevention of Pollution by Garbage from Ships. Garbage disposal in the special area.
17	Establishment of a nationally coordinated action plan for preventing the abandonment of fishing gear and the removal of lost and abandoned fishing nets and gear	Abandoned fishing nets and gear harm sea biota (especially seals, sea birds and fish) and litter the marine environment. The situation can be improved by the establishment of a nationally coordinated action plan for preventing the abandonment of fishing gear and the by a survey of already abandoned fishing gear and the removal of lost and abandoned fishing nets and gear. Implementing the EU Regulation No 404/2011 regarding marking of fishing gear and the EU Regulation No 1224/2009 regarding informing about lost fishing gear.
18	Organizing the removal (campaigns) of ghost nets	Organising community activities and supporting spontaneous local activities for removing lost fishing gear. The measure contributes to the implementation of MARPOL 73/78 International Convention for the Prevention of Pollution from Ships, Annex V Prevention of Pollution by Garbage from Ships and to the implementation of the EU Regulation No 404/2011 regarding marking of fishing gear and the EU Regulation No 1224/2009 regarding informing about lost fishing gear.
19	Establishing no-special-fee waste reception systems in harbours	Establishing no-special-fee waste reception systems in harbours assures the full implementation of HELCOM Recommendation 28E/10, incl. the marine litter caught in fishing nets and since 1 st of January 2006 in MARPOL 73/78, Annex V covered no- special-fee waste reception in harbours.

		The measure contributes to the implementation of MARPOL 73/78 International Convention for the Prevention of Pollution from Ships, Annex V Prevention of Pollution by Garbage from Ships
20	Reduction of marine litter and improving of corresponding monitoring and supervision	Reduction of marine litter and improving of corresponding monitoring and supervisionWill be implemented according to the monitoring activities and objectives set in Estonian Environmental Strategy 2030 and according to the implementation plan 2014-2017 of the National Waste Management Plan 2014-2020.
		The measure also results from HELCOM recommendation to establish a Marine litter action plan. The measure additionally demands the strengthening of the requirements of waste management in construction sites, incl. separate waste collection on construction sites, circumscribing the construction sites and removing the wastes at the construction sites after construction and supervision of construction waste management. When entering the environment, the construction waste can cause pollution with hazardous chemicals, like nonylphenols and their etoxylates (NPE), chlorinated paraffines (SCCP), flame retardants added to construction foam and polystyrene boards (HBCCD). NPE, SCCP and HBCCD are classified as hazardous to the aquatic environment according to the Water Framework Directive and belong to the group of priority hazardous substances according to HELCOM
21	Establishment of national register of impulsive sound	Baltic Sea action plan.Establishment of national register of impulsive sound, collecting data about activities creating impulsive sound and data characterizing the noise level from the database of permits.
22	Appling of maritime spatial planning, putting together a nation-wide maritime spatial plan	 A nation-wide maritime spatial plan will be put together and approved. i) Collection of information regarding uses and interests in marine area. ii) Conducting a conflict analysis to ascertain spatial conflicts and their locations. iii) Minimizing the potential spatial conflicts between marine uses during public display and public involvement. iv) Necessary changes in legal regulation will be

		made. v) SEA of the spatial plan will be accomplished.
23	Putting together guidance materials for issuing permits of maritime activities and for conducting maritime supervision	 A complex of guidance materials will be put together, which covers all the maritime activities and issuing their permits and conducting maritime supervision of the activities. The guidance includes also environmental requirements for proceeding of the permits and minimum requirements of environmental monitoring. i) An inventory of regulation and guidance materials regarding maritime activities will be made, to ascertain sectors, where sufficient guidance materials are lacking. ii) Establishment of sector based guidance materials and development of necessary new regulative documents.
24	The improvement of supervision of the	The supervision of all direct, indirect negative and potentially negative effects and of the implementation
	implementation of existing regulations and restrictions	of existing regulations and restrictions will be improved.