



Baltic Marine Environment Protection Commission

26 February 2018

Final summary report

Project activities
1.1.2017 - 31.12.2017

Implementation and development of key components for the assessment of Status, Pressures and Impacts, and Social and Economic evaluation in the Baltic Sea marine region.



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Contents

1. General Information	2
2. Summary of the achievements under the SPICE project.....	3
Theme 1: Finalization of the HELCOM 2nd holistic assessment.....	4
Theme 2: Marine litter baselines and assessment in the Baltic Sea	7
Theme 3: Economic and Social Analyses	9
Theme 4: Cumulative impacts and maximum allowable pressures on habitats.....	11
3. Tasks undertaken according to the application and state of completion	13
Theme 1: Finalization of the HELCOM 2nd holistic assessment.....	13
Theme 2: Marine litter	15
Theme 3: Economic and social analyses (ESA)	17
Theme 4: Cumulative impacts and maximum allowable pressures on habitats	19
4. List of deliverables	21
5. List of workshops	27
6. Abbreviations of HELCOM groups and projects mentioned in the report	29

1. General Information

Programme concerned: Implementation of the Second Cycle of the Marine Strategy Framework Directive: achieving coherent, coordinated and consistent updates of the determinations of Good Environmental Status, initial assessments and environmental targets

Reference number of the call for proposals: DG ENV/MSFD Second Cycle/2016

Title of the project: Implementation and development of key components for the assessment of Status, Pressures and Impacts, and Social and Economic evaluation in the Baltic Sea marine region (HELCOM SPICE).

Grant agreement number: 11.0661/2016/748065/SUB/EN V.C2

Name of beneficiary of grant agreement: Baltic Marine Environment Commission - Helsinki Commission (HELCOM)

Official legal form: Intergovernmental Organisation

Official registration No.: Not applicable

Official address: Katajanokanlaituri 6B, 00160 Helsinki, Finland

Name and title of the Project Coordinator: Jannica Haldin, Professional Secretary.

Name of partners in the project and abbreviations used:

Finnish Environment Institute (SYKE)

Swedish Agency for Marine and Water Management (SwAM)

University of Tartu, Estonia (EMI)

Polish Institute of Meteorology and Water Management National Research Institute (IMGW-PIB)

Stockholm Environment Institute Tallinn Centre, Sweden (SEI Tallinn)

Sub-contractor: Gothenburg University (GU), Sweden, AquaBiota, Sweden, AKTiivS, Latvia

Start date and end date of the reporting period: 1/1/2017 – 31/12/2017

Start date and end date of the project: 1/1/2017 – 31/12/2017

2. Summary of the achievements under the SPICE project

The SPICE project was designed to contribute directly to the finalization of the 'Second HELCOM Holistic Assessment of Ecosystem Health in the Baltic Sea (HOLAS II)' that is carried out by HELCOM through the HOLAS II project. The assessment covers the whole Baltic Sea marine region and will provide information on the overall environmental status of and pressures on the Baltic Sea as well as social and economic aspects that are linked to the status of the Sea and the human activities impacting upon it. The assessment is developed to follow-up the goals and objectives agreed by all coastal countries and EU in the HELCOM Baltic Sea Action Plan (BSAP, 2007) as well as to be used for the 2018 reporting under the EU Marine Strategy Framework Directive (MSFD) as agreed by those Contracting Parties of the Helsinki Convention that are also EU Member States. The approaches of HOLAS II and SPICE follows as relevant the revised Commission Decision on GES criteria.

The development of the second holistic assessment is carried out in two steps: a first version was successfully published in June 2017, consisting of a [summary report](#) and supplementary material, all of which is published on a [dedicated website](#). An updated version, including 2016 data and refined methodology, will be published by June 2018.

Theme 1 carried out the integrated assessments for the 2017 version and contribute to updating data for the 2018 version. Themes 2-4 work with a longer time-perspective and will mainly contribute to the 2018 version.

The SPICE project has specifically contribute to following:

- Theme 1: finalizing and quality assure the thematic assessments on biodiversity, eutrophication, hazardous substances as well as the assessment of pressures and impacts and support the final collation of data and the visual presentation in the 2nd holistic assessment,
- Theme 2: developing marine litter indicators towards operationalization and prepare a proposal for the assessment of marine litter in the 2nd holistic assessment,
- Theme 3: further developing and implementing the economic and social analyses at the Baltic Sea regional scale,
- Theme 4: developing guidelines for assessments of cumulative impacts and thresholds related to pelagic and seabed habitats

Theme 1: Finalization of the HELCOM 2nd holistic assessment

WP 1.1 Data collation

This work package made available and quality assured data requested from the Contracting Parties to the Helsinki Convention for use in the HELCOM 2nd holistic assessment (HOLAS II) which extends beyond the regular HELCOM data collection activities.

The work included preparation, quality assurance and harmonization of spatial datasets for dredging and deposit areas as well as sand and gravel extraction for the entire Baltic sea for operations carried out during assessment period 2011-2015. For HOLAS II, a data request to provide bird count observations (breeding and wintering) was issued and resulting data harmonization and preparation for approval workspace was carried out. The approved dataset were made publicly available using HELCOM Map and Data service (viewing) and HELCOM Metadata catalogue (INSPIRE compliant metadata and download).

The work package collated information on hazardous substances WFD results, and prepared, review and published aggregated pressure layer maps on inputs of nutrients and contaminants based on monitoring data and supplementary datasets.

Within this work package data poor datasets without regular data collection activity was supplemented with additional data sources, such as Open Street Map. This approach was applied for dataset with limited response/coverage resulting from data request carried out by HELCOM. These dataset include Bridges, Cables and Wind farms, which were used in various aggregated pressure layers.

The work package included also updating of selected human activities datasets with data for the year 2016, to be included in the 2018 update of HOLAS II report. The updated datasets are in the approval process in February 2018, and will be published in July 2018 together with HOLAS II update.

Part of the work was also production of time series graphs for HOLAS II report. The time series graphs were embedded both in eutrophication related core indicator report and thematic supplementary report.

WP 1.2 Production and finalization of assessment results

The integrated assessment approaches used in State of the Baltic Sea report (HOLAS II), for biodiversity, eutrophication, hazardous substances and cumulative impacts on the marine environment, were agreed in December 2016 (Outcome of [HOD 51-2016](#), para 6.28-6.37) and was implemented through a series of HELCOM SPICE workshops carried out in March 2017.

The results have been included in the first version of the State of the Baltic Sea report, presented for agreement at HELCOM HOD 52-2017 (20-21 June 2017).

The assessment results are document in following supplementary reports available at HOLAS II website:

- Biodiversity
- Cumulative impacts on marine environment
- Eutrophication
- Hazardous substances

WP 1.3 Visualization of results

The visual products for the State of the Baltic Sea report (HOLAS II) includes information on state, pressures, impacts, and temporal trends, and are communicated as maps, graphs, figures, and fact sheets.

The project has delivered a web page (<http://stateofthebalticsea.helcom.fi/>) presenting the assessment results, designed and implemented following user-centred design principles, with the purpose of building interest and providing the assessment results in an easily accessible format.

The web page includes several interactive embedded map viewers (Figure 1) of the most central assessment results. For the PDF version of the first results, a light layout was produced. Graphical design guidelines were created and applied to assessment maps and part of the other visual materials.

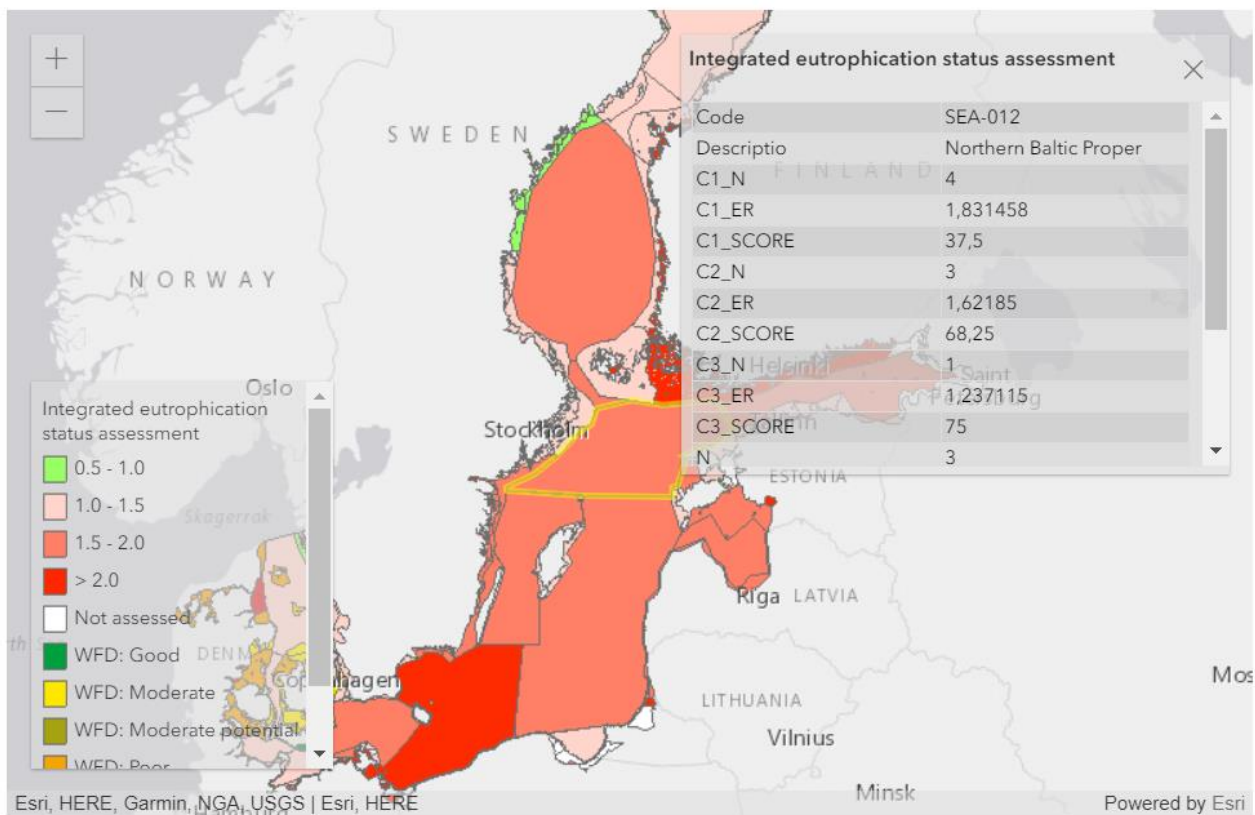


Figure 1. Interactive map viewer embedded at HOLAS II website.

Interactive graphs were implemented for selected set of core indicator fact sheet result pages (Figure 2). The interactive graphs include a drop-down menu for selecting results for a specific area.

The task also include creation of easily understandable infographics to summarize information (Figure 3).

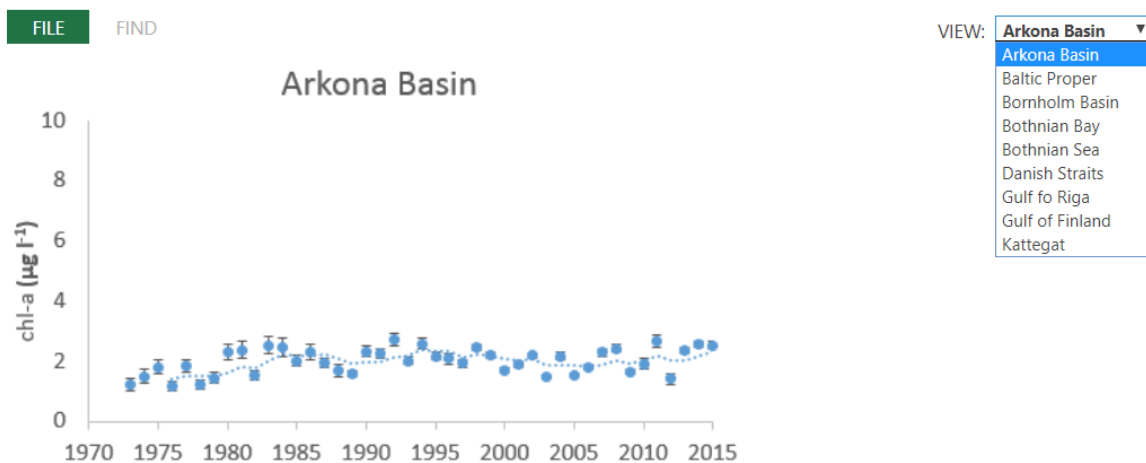


Figure 2. Example of interactive graph for Chlorophyll-a time series data.

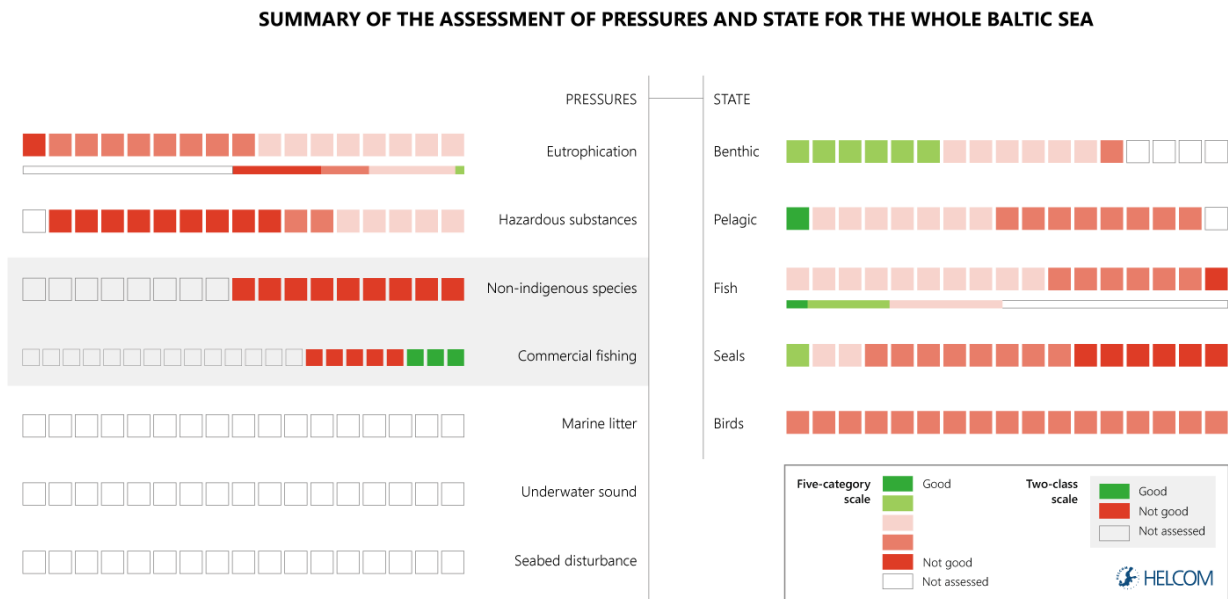


Figure 3. Example of infographic created for State of the Baltic Sea report.

Theme 2: Marine litter baselines and assessment in the Baltic Sea

WP 2.1 Development of baselines of marine litter

Available data from regular monitoring as carried out by Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden for the period 2012 – 2016 has been gathered. Data was treated to calculate statistics parameters such as mean, median, standard deviation and relative standard deviation determined for each category of litter material and a sum of all items for specific beach types (reference, rural, urban and peri-urban). The calculations were carried out for two periods (i) 2012-2016 and (ii) 2015-2016. The first period was chosen because most of the countries (Estonia, Finland, Germany, Latvia, Lithuania and Sweden) started their beach litter monitoring in 2012. At the same time since 2015 monitoring is carried out in all countries (except Lithuania and Russia) and since this year, the network of monitoring stations has expanded, which may provide a more complete and coherent image of the extent of beach litter items found in different regions (see **Annex 1** and **deliverable 2.1.1.a**).

Based on raw national available data obtained through a specific data call, top 20 beach litter items have been identified for the Baltic Sea region as a whole (considering separately each type of beach) as well as at a sub-basin level using the rank method as advised by the HELCOM EN-Marine Litter (see **Annex 1** and **deliverable 2.1.1.b**).

National data (Denmark, Estonia, Germany, Latvia, Lithuania, Poland and Sweden) on marine litter recorded in trawl hauls under the BITS (Baltic international trawl surveys) monitoring programme, during the years 2012-2016 has been compiled. Data was analyzed to determine the average total number of seafloor litter items at sub-basin level (both in terms of weight and number of items) as well as the material composition of the litter items. Also the Top 15 seafloor litter items for all the Baltic Sea area where the BITS programme is applied have been identified. Finally, an analysis of the density of litter found depending on the seafloor type was conducted (see **Annex 1** and **deliverable 2.1.2**).

A data call conducted through the HELCOM EN-Marine Litter enabled updating available monitoring and research data on microlitter in the Baltic Sea. Based on compiled information a report was elaborated aiming at a future harmonisation of the protocols used for data collection and analyses. It includes maps showing spatial coverage of the studies for water surface, water column and sediment (see **Annex 1** and **deliverable 2.1.3**).

WP 2.2 Proposal for the marine litter assessment as part of HOLAS II

A proposal for the assessment of litter on the Baltic Sea beaches as well as litter on the seafloor was included in the [first version of the State of the Baltic Sea report](#). Work is on-going to use the outcomes of this Theme 2 in the section on marine litter in the updated 'State of the Baltic Sea report, June 2017' ([document 7-5](#) of HOLAS II 8-2017).

WP 2.3 Regional database for beach litter and micro litter

The three different databases or programmes which are used in the work with marine litter related issues in the HELCOM area have been analysed and their characteristics studied. The three studied ones are the OSPAR database, the MARLIN database and the Marine Litter Watch (EEA). This analysis has been conducted as a prerequisite to identify the best option for setting up a regional database for beach litter. The report contains a summary of key elements from the different databases studied and the basic requirements of the HELCOM database for beach litter to be considered when setting such database (see **Annex 1** and **deliverable 2.3.1**).

Due to the lack of harmonization on microlitter data available at the moment (see deliverable 2.1.3), it is considered premature to look into the specifications needed for a regional microlitter database.

Finally, compiled beach litter data has been made available in the [HELCOM Map and Data Service](#).

WP 2.4 Regional cooperation and dissemination of results on marine litter

The SPICE Workshop on microlitter was held on 7-8 November 2017 in Helsinki. The workshop enabled sharing the results achieved through Theme 2 of the SPICE project, having a special focus on microlitter:

- sampling environments (i.a. water surface, water column, sediment, biota),
- options for sampling (i.a. manta trawl, Baby-Bongo net, box core), and
- analytical methods (i.a. stereo microscopy, Raman, FTIR, chemical digestion, enzyme digestion).

The outcome of the workshop is included as **deliverable 2.4.1** (see also **Annex 1**).

Exchange of information in the Baltic Sea region has taken place throughout the project, for example, sharing updates with the meetings of the HELCOM EN-Marine Litter and in the TG ML meetings and workshops.

Theme 3: Economic and Social Analyses

WP 3.1 Regional ESA analyses and development of the ESA framework

Regional use of marine waters analysis has been finalized for selected sectors for all Baltic Sea region countries. These sectors included fish and shellfish harvesting, marine aquaculture, tourism and recreation, offshore wind energy production, and transport infrastructure and shipping. Regional cost of degradation analysis has been completed for selected degradation themes and ecosystem services. The degradation themes included eutrophication and biodiversity-related themes, and ecosystem services included recreation. The results on eutrophication and recreation were based on economic valuation studies covering all nine Baltic Sea countries. The results of the regional use of marine waters and cost of degradation analysis have been included in Chapters 3, 4 and 5 of the first version of the [HELCOM 'State of the Baltic Sea' summary report](#) (HOLAS II) and the methodology and results have been presented in more detail in the [supplementary report on economic and social analyses](#), published in the summer 2017. Also a proposal was made and accepted on how to report the ESA results to policy-makers and the public as part of HOLAS II assessment report.

An ecosystem service approach in the economic and social analysis (ESA) framework has been developed. The goal was to examine how different activities impact and are dependent on ecosystem services. The linkages were explored using quantitative data when possible and expert judgements when quantitative data were lacking. The DPSIR (*Driver – Pressure – State – Impact – Response*) approach was followed. For assessing the relationships between human activities listed in MSFD Annex III and marine ecosystem services, two types of methods were compared: the direct (DI) method and the indirect (DPSI) method and they were tested using the Swedish marine area as a case study. The results showed that the two different methods for assessing the impact on ecosystem services were relatively similar, however noteworthy differences appeared. For example the impact of continued noise assessed with indirect method was considerably higher than the impact given by direct method. The results also showed that fishing, marine tourism and marine recreation were the activities with the highest dependency on ecosystem services, and that the indirect method could be developed further (see **Appendix 1** and Theme 3 **deliverable 1**).

The background and the recommendations on regional ESA for European marine areas have been proposed. The recommendations build on the experiences from developing the regional ESA for the Baltic Sea region, describe how the ESA could support policies for protecting the marine environment and highlights the benefits of regional ESA (see **Appendix 1** and Theme 3 **deliverable 2**).

WP 3.2 Development of a regional business as usual (BAU) scenario to be used as a baseline

The aim of WP 3.2 was to identify the experiences, possibilities, challenges and approaches for developing a regional business as usual scenario to be used as a baseline for assessing changes in pressures and state, progress towards achieving good environmental status (GES), as well as for the regional ESA. A comparative analysis of the national BAUs used in Sweden, Finland, Estonia and Latvia was done. The use of the regional BAU in the cost of degradation analysis as well as in the planning of future policy measures was analysed. To describe the BAU development process, an illustration of the BAU of non-indigenous species has been presented. Recommendations for regional BAU and related work are provided. Methodological principles and approaches for the regional BAU were developed, and the elements of the regional BAU process have been described. The proposal for the regional BAU work for the revision of Baltic Sea Action Plan II was made and is as follows: 1) Identification of national BAU results for the HOLAS II report (HELCOM data call); 2) Consultation with the sea region ESA and GES experts on a proposed methodology for the regional BAU to agree on it during the period of preparation of the updated BSAP; 3) Plan for a regional fit-for-purpose cost of degradation analysis and results for HOLAS III report; 4) Plan for developing a regional quantitative BAU scenario for selected significant human activities in HOLAS III assessment (see **Appendix 1** and theme 3 **deliverable 3**).

WP 3.3 Developing tools towards integrated assessment of the marine environment

The objective of the SPICE WP 3.3 was to review existing literature, tools used in the HELCOM state of the Baltic Sea assessment, and the existing projects to find ways to operationalize the conceptual model of the regional ESA developed in the [HELCOM TAPAS project](#). The literature review focused on methods and approaches that allow for considering both the state of the sea and the related economic impacts together. The reviewed options included bioeconomic modelling, ecological-economic modelling, input-output modelling, and general equilibrium modelling and index-based approaches. The results show that various methods with sound theoretical basis are available and have been used to support marine policies. Thus, the future assessments should be conducted using an interdisciplinary and integrated approach so that marine biologists and marine economists would work together. The review of the existing tools used in the HELCOM HOLAS II show that the key limitation of the use of these tools in the economic and social analyses is the separation of the cumulative effect assessment from the state assessment. Thus, a possible first step to advance tools for integrated marine ecological-economic assessment would be to modify the tools used to calculate Baltic Sea Pressure and Impact indicators so that they would have had built-in functions to relate activities to pressures in correct quantities. Such modified tool could be used for example in the development of regional Business-as-Usual (BAU) scenario or to support the update of the Baltic Sea Action plan (see **Appendix 1** and Theme 3 **deliverable 4**).

WP 3.4 Regional cooperation and disseminating the ESA results

The implementation and development of the regional ESA was made in close collaboration with the SPICE project partners (HELCOM, Finnish Environment Institute, SEI Tallinn and SwAM) and HELCOM Contracting Parties. A [HELCOM workshop on economic and social analyses supported by the SPICE project](#) was arranged in Riga, Latvia 1 November 2017. The Workshop contributed to the development of the economic and social analyses in the Baltic Sea Region, with a particular focus on the HELCOM SPICE project. The outcome of the workshop is included as **deliverable 5** (see also **Annex 1**). The methods and findings of the regional economic and social analyses of the use of marine waters and cost of degradation were presented and discussed in the [workshop on the HOLAS II economic and social analyses](#).

The information exchange has taken place in a [joint HELCOM – BONUS BALTICAPP regional workshop](#) on the use of ecological–economic research to support and improve marine policy implementation in the Baltic Sea region, in the EU Working Group on Programme of Measures and Socio-Economic Analysis (WG POMESA) meeting and the exchange was continued in the [HELCOM workshop on economic and social analyses supported by the SPICE](#) project where ESA experts from Regional Sea Conventions OSPAR and Barcelona Conventions were present.

Theme 4: Cumulative impacts and maximum allowable pressures on habitats

WP 4.1 An operational method for assessment of the extent of habitats lost and disturbed by human activities

The assessment of habitats carried out under different policy frameworks is often based on different classification systems. Under the work package 4.1 the project has worked to develop a suggestion for a translation matrix between HELCOM HUB, broad habitat types as defined under the Marine Strategy Framework Directive, and Natura 2000 habitats as defined under the Habitats Directive, and a proposal on the principles of aggregating assessment results within different hierarchical levels of HUB. The proposed guidelines (Appendix 1, deliverable 4.1.2), was developed further taking into account the input received from Baltic Sea states under the theme 4 workshop held in September, and includes three test cases elaborated to demonstrate the proposed approaches.

The deliverables under other SPICE theme 4 tasks, especially 4.1.2 and 4.2.1, lay the foundation for the remaining work under WP 4.1, namely: developing a step-wise method guideline for carrying out a technical assessment of the lost, disturbed and adversely affected area of benthic and pelagic habitat types (Appendix 1, deliverable 4.1.1).

WP 4.2 Development of an approach to define thresholds for GES for the underwater habitat assessment

For task 4.2.1 a practical definition of adversely affected habitats has been proposed on the basis of the pressure - state correlations made under the HELCOM TAPAS and BalticBOOST projects. Habitat-specific thresholds for the amount of pressures causing 'adverse effects' have been explored and proposed by comparing indicators for the habitat structure and function (e.g. the benthic quality index) and the specific and cumulative pressures (Appendix 1, deliverable 4.2.1). The initial results of task 4.2.1, as well as the challenges faced, were presented at the SPICE Theme 4 workshop and consequent analysis made use of the input received by the experts present there. For task 4.2.3 the EU Water Framework Directive (WFD) and HELCOM HOLAS II assessments were used for a cross-comparison of the area lost or disturbed under different assessment regimes. HELCOM Baltic Sea Pressure Index (BSPI), Baltic Sea Impact Index (BSII), potential cumulative impacts on benthic habitats, physical disturbance or damage to seabed, and physical loss data layers were used as pressure inputs. Pearson rank correlation and ANOVA were used to statistically test the relationships between assessments and pressures. These results are presented in under deliverable 4.2.3. For task 4.2.4 thresholds were tested for the proportion of a habitat being adversely affected but still indicating GES. This was tested at a suitable level of habitat classification and proposing geographical scales for the assessment. Results from the previous tasks were utilized and draft assessments were made (Appendix 1, deliverable 4.2.4). For task 4.2.5 the adverse effects assessed in under other tasks in WP4 were analyzed in relation to setting environmental targets under the MSFD (Appendix 1, deliverable 4.2.5).

The task 4.2.2 on the extent of lost and disturbed habitats (Appendix 1, deliverable 4.2.2) was completed in March-April and the results were submitted to the HOLAS II report. The remaining tasks under 4.2 where all completed in in the autumn of 2017.

WP 4.3 Regional cooperation and dissemination of results on assessment of habitats

The SPICE Theme 4 workshop to support and disseminate the ongoing work under Theme 4 took place 27-28 of September 2017 on the premises of the HELCOM Secretariat, Helsinki, Finland. During the workshop currently ongoing work on pressures and impacts on benthic and pelagic habitats outside of the SPICE project was presented and discussed (e.g. HARMONY and work being done under ICES). The interim results under 4.1 and 4.2 were presented. In an effort to support the work under Theme 4 a portion of the workshop was dedicated to working in breakout groups, suggesting solutions to challenges identified in the

course of the SPICE work. The input received from the breakout groups, as well as from the resulting plenary discussions, were taken onboard in the continued work. The work under SPICE theme 4 was also presented in HELCOM groups, including the State & Conservation (providing technical guidance on monitoring, biodiversity, and conservation) and GEAR (providing strategic guidance on implementing the ecosystem approach, including the MSFD) Working Group meetings, as well participation from the project in e.g. EC WG GES and other meetings and workshops arranged related to the assessment of habitats.

3. Tasks undertaken according to the application and state of completion

Theme 1: Finalization of the HELCOM 2nd holistic assessment

Task	Activity under the reporting period	Partners	Status
WP 1.1 Data collation			
1.1.1 Process and harmonize the reported data on dredged material and extraction of sand and gravel.	Harmonized Baltic-wide dataset 2011-2015 on dredging and sand and gravel extraction available in GIS format. (See Annex II)	HELCOM	Completed
1.1.2 Process and harmonize datasets on bird counts for HELCOM Birds database format.	Harmonized Baltic-wide dataset on bird counts until 2015 based on data submitted by HELCOM CPs available in GIS format. (See Annex II)	HELCOM	Completed
1.1.3 Process and harmonize requested national coastal WFD results on hazardous substances.	Baltic-wide information on WFD assessment results on hazardous substances based on results submitted by HELCOM CPs in GIS format. (See Annex II)	HELCOM	Completed
1.1.4 Process spatial pressure datasets on input of nutrients and hazardous substances for specific HOLAS II use.	Baltic-wide dataset available on concentration nutrients and status of hazardous substances. (See Annex II)	HELCOM	Completed
1.1.5 Supplement data-poor datasets on human activities with possible national and international sources as identified in the HOLAS II data collection process.	Baltic wide spatial datasets on human activities have been complemented for the first State of the Baltic Sea version 2011-2015. (See Annex II)	HELCOM	Completed
1.1.6 Update of all collected HOLAS II datasets with 2016 data and production of final gridded data products. Produce selected data sets for assessments of temporal trends.	Graphs on temporal trends in biodiversity, hazardous substances, eutrophication and anthropogenic pressures and associated statistics have been produced as relevant and feasible and are included in the first version of the State of the Baltic Sea report	HELCOM	Completed
WP 1.2 Production and finalization of assessment results			
1.2.1 Carry out draft thematic assessments based on agreed approaches and data made available by Contracting Parties through the agreements in HELCOM.	Draft thematic assessment were carried out in February/March 2017. Final results were published in July 2017.	HELCOM: haz subst, SYKE: eutro, biodiv, BSII	Completed
1.2.2 Prepare background material and lead HELCOM workshops for quality assurance of data, methods, indicator results, confidence assessments and for agreement of assessment results.	14 March 2017: HELCOM SPICE Eutrophication workshop 15 March 2017: HELCOM SPICE Biodiversity workshop 16 March 2017: HELCOM SPICE Hazardous substances workshop	HELCOM: haz subst, SYKE: eutro, biodiv, BSII	Completed

Task	Activity under the reporting period	Partners	Status
	21 March 2017: HELCOM SPICE Baltic Sea Impact Index workshop		
1.2.3 Follow-up on the guidance and recommendations from Contracting Parties, including possible adjustment to the assessment tools.	Results of integrated assessments presented to HOLAS II 7-2017 and agreement on minor adjustment to assessment tools at State and Conservation 6-2017.	HELCOM: haz subst, SYKE: eutro, biodiv, BSII	Completed
1.2.4 Finalize the thematic assessments, including visual presentation of results.	Integrated assessment results presented in the first version of the State of the Baltic Sea report.	HELCOM	Completed
WP 1.3 Visualization of results			
1.3.1 Design of the assessment web pages, for the purpose of building interest and presenting the assessment results.	Web-site for presentation of the State of the Baltic Sea report. Website style guidelines.	HELCOM and consultant sub-contracted by HELCOM	Completed
1.3.2 Design and creation of high-quality visualizations of the main results.	Infographics and maps for use in the State of the Baltic Sea report developed and included in the first version of the report.	HELCOM	Completed
1.3.3 Visual outlook for figures (both print and online).	Visual guidelines for graphs and tables.	HELCOM and consultant sub-contracted by HELCOM	Completed
1.3.4 Interactive web-based chart/figure tool; as well as the design of summary publications of the results, released both print and online.	Summary report 'State of the Baltic Sea' report (HOLAS II) as a pdf. Summary report style guideline. Implementing interactive map viewers and graphs according to visual guidelines in State of the Baltic Sea website and core indicator fact sheet web pages.	HELCOM and consultant sub-contracted by HELCOM	Completed

Theme 2: Marine litter

Task	Activity under the reporting period	Partners	Status
WP 2.1 Development of baselines of marine litter			
2.1.1 Analyse available data aiming at defining a baseline for beach litter in the Baltic Sea region.	Analysis of data from regular national monitoring as grouped into the big categories included in the TG Master List. Calculations done for (i) 2012-2016 and (ii) 2015-2016. Top 20 beach litter items identified at regional and sub-regional level.	IMGW PIB SYKE HELCOM	Completed
2.1.2 Explore the possibilities to define a baseline for litter on the seafloor in the Baltic Sea region.	Compilation of national data on seafloor litter in the Baltic Sea (2012-2016). Analysis of data: quantification, material analysis, top 15 items identification, influence of the type of sediment.	GU IMGW HELCOM	Completed
2.1.3 Compilation, treatment and analysis of microlitter data available in the Baltic Sea region	Compilation and analysis, including spatial coverage. of microlitter activities: research and monitoring in the Baltic Sea.	SYKE IMGW HELCOM.	Completed
WP 2.2 Proposal for the marine litter assessment as part of HOLAS II			
2.2.1 Proposal for the assessment of litter on the Baltic Sea beaches in HOLAS II.	Drafting of the descriptive section on beach litter in the HOLAS II report.	IMGW PIB SYKE GU HELCOM	Completed
2.2.2 Proposal for the assessment of the litter present on the seafloor on the Baltic Sea region in HOLAS II	Drafting of the descriptive section on litter on the seafloor in the HOLAS II report.	GU HELCOM	Completed
WP 2.3 Regional database for beach litter and micro litter			
2.3.1 Identify the best option for setting up a regional database for beach litter	Analysis of the three databases used in the HELCOM (OSPAR, MARLIN and the Marine Litter Watch). Summary of key elements from the three databases produced and identification of the basic requirements of the HELCOM database to be considered when setting such database.	HELCOM IMGW PIB SYKE GU	Completed
2.3.2 Identify the best option for setting up a regional database for microlitter	Due to the lack of harmonization on microlitter data available at the moment (see deliverable 4), it is considered premature to look into the specifications needed for a regional microlitter database.	HELCOM IMGW PIB SYKE GU	Completed
2.3.3 Make Baltic data products available	Compiled beach litter data are available in the HELCOM Map and Data Service	HELCOM IMGW PIB SYKE GU	Completed
WP 2.4 Regional cooperation and dissemination of results on marine litter			
2.4.1 Arranging a HELCOM workshop on Theme 2	Workshop held on 7-8 November 2017 in Helsinki (Finland).	HELCOM GU IMGW PIB SYKE	Completed

2.4.2. Dissemination of results and information sharing	Presentation of SPICE project in: the 11th Meeting of TG ML, on-line meeting of the HELCOM EN-Marine Litter 30 May 2017 , 9 August 2017 and 11 October 2017 , STATE&CONSERVATION 7-2017 (Presentation 13), GEAR 17-2017 (document 3-5), HOLAS II 7-2017 (document 7-5)	HELCOM GU IMGW PIB SYKE	Completed
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Theme 3: Economic and social analyses (ESA)

Task	Activity under the reporting period	Partners	Status
WP 3.1 Regional ESA analyses and development of the ESA framework			
3.1.1 Conducting regional use of marine waters analysis using a combined marine water accounting and ecosystem services approach.	Regional use of marine waters analysis has been finalized for selected sectors for all Baltic Sea region countries.	HELCOM SwAM SYKE SEI Tallinn	Completed
3.1.2 Conducting regional cost of degradation analysis using the thematic approach.	Regional cost of degradation analysis has been finalized for selected degradation themes and ecosystem services for all Baltic Sea Region countries.	HELCOM SwAM SYKE SEI Tallinn	Completed
3.1.3 Developing the ecosystem service approach in the ESA framework.	An approach for analysing the relationship of use of marine waters and ecosystem services in the Baltic Sea has been developed. The approach is customised to BSPI enabling results for Baltic Sea area given data from BSPI.	HELCOM SwAM SYKE SEI Tallinn	Completed
3.1.4 Providing recommendations on regional ESA for European marine areas.	Recommendations and background on the regional ESA for European marine areas have been provided.	HELCOM SwAM SYKE SEI Tallinn	Completed
3.1.5 Proposal on how to report the ESA results to policy-makers and the public as part of HOLAS II assessment report.	Proposal of how to report ESA results has been made and results have been included in the HOLAS II summary report and supplementary report on ESA.	HELCOM SwAM SYKE SEI Tallinn	Completed
WP3.2 Development of a regional business as usual scenario to be used as a baseline			
3.2.1 Comparative analysis of national baselines used across the Baltic Sea region states in the earlier round of Initial Assessment and Programmes of Measures.	Comparative analysis to identify how BAUs were defined and used in the national MSFD processes in Sweden, Finland, Estonia and Latvia has been conducted.	HELCOM SwAM SYKE SEI Tallinn	Completed
3.2.2 Developing a methodology and principles for regional baseline.	Methodology and principles for developing the regional baseline using BAU have been identified.	HELCOM SwAM SYKE SEI Tallinn	Completed
3.2.3 Assessing the use of the baseline in the cost of degradation analysis, as well as future Programmes of Measures.	Current state and business-as-usual approach for defining the baseline has been analysed and compared. An illustration of the use of BAU as the baseline for the introduction of non-indigenous species has been provided. Recommendations on the use of BAU for planning of future measures have been provided.	HELCOM SwAM SYKE SEI Tallinn	Completed
WP3.3 Developing tools towards integrated assessment of the marine environment			
3.3.1 Assessing the possibilities to use the Baltic Sea Pressure and Impact Index (BSPII) for evaluating the effect of human activities, pressures and management measures on the state of	The possibility to apply the Baltic Sea Pressure and Impact index in the regional ESA analyses have been assessed and reported.	HELCOM SwAM SYKE SEI Tallinn	Completed

the marine environment for regional ESA.			
3.3.2 Reviewing available project tools and data for assessing links between pressures and state of the marine environment and their applicability in the regional ESA.	Review has been conducted and reported	HELCOM SwAM 2 SYKE SEI Tallinn	Completed
3.3.3 Providing recommendations on how to develop and apply the existing tools to support economic and social analyses.	Based on the tasks 3.3.1 and 3.3.2 recommendation have been given and reported	HELCOM SwAM SYKE SEI Tallinn	Completed
WP3.4 Regional cooperation and disseminating the ESA results			
3.4.1 Arranging a HELCOM workshop on the economic and social analyses.	HELCOM workshop on economic and social analyses supported by the SPICE project was arranged in Riga, Latvia 1 November 2017	HELCOM SwAM SYKE SEI Tallinn	Completed
3.4.2 Exchanging information with other Regional Sea Conventions.	Exchange of information has taken place e.g. in the joint HELCOM – BONUS BALTICAPP workshop , HOLAS II ESA workshop , WG POMESA meetings and HELCOM workshop on economic and social analyses supported by the SPICE project .	HELCOM SwAM SYKE SEI Tallinn	Completed

Theme 4: Cumulative impacts and maximum allowable pressures on habitats

Task	Activity under the reporting period	Partners	Status
WP 4.1 An operational method for assessment of the extent of habitats lost and disturbed by human activities			
4.1.1 A step-wise method guideline for carrying out a technical assessment of the lost, disturbed and adversely affected area (km ²) of benthic and pelagic habitat types from different activities.	Based on the deliverables under the other tasks under theme 4, as well as those developed under the BalticBOOST and TAPAS projects, a set of guidelines were developed.	HELCOM SwAM: SYKE EMI	Completed
4.1.2 A practical guidance how different levels of EUNIS habitats (e.g. broader and more-detailed HELCOM underwater biotopes, both pelagic and benthic) can be tackled within the same assessment.	Development of the translation guidelines between different directives. Development and testing the hierarchical aggregation of status assessment.	HELCOM SwAM SYKE EMI	Completed
WP 4.2 Development of an approach to define thresholds for GES for the underwater habitat assessment			
4.2.1 Definition of adversely affected habitats.	Data from the partners was collected, pristine state prioritization was set, spatial prioritization of pressures was done and sensitive/tolerant spp were selected as state variables. This was used as a basis for exploring habitat-specific thresholds, striving at identifying the amount of pressures causing 'adverse effects'. A practical definition of adverse effect was proposed on the basis of the pressure - state correlations made under the HELCOM TAPAS and BalticBOOST projects Based on the analysis thresholds were proposed by comparing indicators for the habitat structure and function (e.g. the benthic quality index)	HELCOM SwAM SYKE EMI	Completed
4.2.2 Spatial data layers with realistic extent estimates of lost and disturbed habitats.	Completed in March-April and results submitted to the HOLAS II report.	HELCOM	Completed
4.2.3 A cross-comparison of the area lost or disturbed against status assessments under different regimes (EU WFD, EU HBD, MSFD, HELCOM HOLAS I/II or core indicators).	EU Water Framework Directive (WFD) and HELCOM HOLAS II assessments were used for a cross-comparison of the area lost or disturbed under different assessment regimes. HELCOM Baltic Sea Pressure Index (BSPI), Baltic Sea Impact Index (BSII), potential cumulative impacts on benthic habitats, physical disturbance or damage to seabed, and physical loss data layers were used as pressure inputs. Pearson rank correlation and ANOVA were used to statistically test the relationships between assessments and pressures.	SwAM SYKE EMI	Completed

Task	Activity under the reporting period	Partners	Status
4.2.4 Test thresholds for an assessment of habitats.	Thresholds were tested for the proportion of a habitat being adversely affected but still indicating GES. This was tested at a suitable level of habitat classification and proposing geographical scales for the assessment. Results from the previous tasks were utilized and draft assessments were made	SwAM SYKE	Completed
4.2.5 Propose how the thresholds can be applied for the development of environmental targets affecting seabed habitats.	The adverse effects assessed under other tasks in WP4 were analyzed in relation to setting environmental targets under the MSFD	SYKE	Completed
WP4.3 Regional cooperation and dissemination of results on assessment of habitats			
4.3.1 Arranging a HELCOM workshop.	Experts nominated by Contracting Parties to the Helsinki convention, as well as other RSC, were invited to partake in the progress of the project as well as provide guidance on upcoming work. The workshop took place 27-28 September 2017, at the HELCOM Secretariat.	HELCOM	Completed
4.3.2 Participation in meetings and workshops arranged related to the assessment of habitats under the MSFD.	The project partners have taken part in eg the WG GES meetings, presented the progress of the work and expected deliverables at several levels of the HELCOM structure as well as taken part in national meetings related to the assessment of habitats.	HELCOM SwAM SYKE EMI	Completed

4. List of deliverables

Associated reports and documents are provide in **Appendix 1**.

Theme	Name and Deliverable		
1.1	All data collected for the HOLAS II assessment are made available in a harmonized pan-Baltic thematic data products following theme-specific format defined by the HOLAS II process as information needed for the assessment and as input for the Baltic Sea Pressure/Impact Index. All data products have been made available for view and download using the HELCOM Map and Data Service. Deliverable URLs are listed in table below.		
	Task	Deliverable (spatial data product title)	Deliverable URL (Metadata link)
	1.1.1 Process and harmonize the reported data on dredged material and extraction of sand and gravel.	Dredging areas 2011-2015	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/43912bdf-5676-4f8b-9388-0ce2702e1c0e
		Dredging points 2011-2015	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/444a9331-5ced-490e-a29b-217b840197b0
		Extraction of sand and gravel	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/14cb2982-d590-45cb-aa03-5217e52ddf0b
	1.1.2 Process and harmonize datasets on bird counts for HELCOM Birds database format.	Abundance of waterbirds in the breeding season data	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/10108cf6-0cf5-4a6d-a42c-3f446573dfd6
		Abundance of waterbirds in the wintering season data	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/6014538b-5a78-42c9-a9b2-b070f52492c3
	1.1.3 Process and harmonize requested national coastal WFD results on	Baltic-wide information on WFD assessment results on hazardous substances based on	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/da419ea6-bea5-4f9d-8c7c-1a91efdfa474

	hazardous substances.	results submitted by HELCOM CPs in GIS format.	
	1.1.4 Process spatial pressure datasets on input of nutrients and hazardous substances for specific HOLAS II use.	Input of nutrients - Total nitrogen	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/2249355e-e436-4376-b848-e9580a628278
Input of Nutrients – Total Phosphorus		http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/104a688a-9221-46d1-901c-d701926e38cd	
Input of hazardous substances		http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/7dbc9f0d-8192-4426-8112-740427abe2bf	
	1.1.5 Supplement data-poor datasets on human activities with possible national and international sources as identified in the HOLAS II data collection process.	Bridges	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/8a4b2ff4-30a1-430a-ba55-dfec57ebed97
Cables		http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/44c3b25e-8792-4a41-8934-bc105be04e49	
Wind farms		http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/f2841aeb-f067-4b8d-ad64-e55c945f17d6	
	1.1.6 Update of all collected HOLAS II datasets with 2016 data and production of final gridded data products. Produce selected data sets for assessments of temporal trends.	Temporal trend figures were produced for the Eutrophication assessment supplementary report. Update of identified priority spatial dataset with 2016 data has been carried out. The datasets are undergoing review	Temporal trends described in Eutrophication supplementary report: http://stateofthebalticsea.helcom.fi/wp-content/uploads/2017/09/HELCOM_The_integrated_assessment_of_eutrophication_Supplementary_report_first_version_2017.pdf

		under HOLAS II 2018 update process and will be published in June 2018.	
1.2	Delivery of quality assured assessment results regarding the status of biodiversity, eutrophication and hazardous substances, as well as pressure and impacts in the Baltic Sea region, endorsed by the EU Member States of the Baltic Sea marine region, to be included in the first version of the HELCOM 2 nd holistic assessment		
	Task	Deliverable (spatial data product / workshop)	Deliverable URL (Metadata link / Workshop website)
	1.2.1 Carry out draft thematic assessments based on agreed approaches and data made available by Contracting Parties through the agreements in HELCOM.	Integrated biodiversity status assessment - seals	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/4be124be-79c2-42d6-8828-db957ad6f7b5
		Integrated biodiversity status assessment - fish	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/63f2c36d-b67e-411e-b075-b4f0a65d0ead
		Integrated biodiversity status assessment - pelagic habitats	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/a83abaf0-651e-4668-bc4a-ac22adb065d6
		Integrated biodiversity status assessment - benthic habitats	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/4e60c259-2965-43fa-8439-8773a743c0ac
		Integrated contamination status assessment	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/da419ea6-bea5-4f9d-8c7c-1a91efdfa474
		Integrated eutrophication status assessment	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/7ce6abce-583f-425e-9ae8-d1d6171e5198
		Baltic Sea Impact Index (BSII)	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/b018a687-4915-4e25-92a6-f799061c94ad
		Baltic Sea Pressure Index (BSPI)	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/8ba0a33b-232e-40da-a4fe-250290521cf4

	Potential cumulative impacts on benthic habitats	http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/37da2d55-cbdf-4399-851f-d2a6cd3abd33
1.2.2 Prepare background material and lead HELCOM workshops for quality assurance of data, methods, indicator results, confidence assessments and for agreement of assessment results.	Workshop materials: Biodiversity	https://portal.helcom.fi/meetings/HELCOM%20PICE%20Biodiv%20WS%201-2017-425/default.aspx
	Workshop materials: Contaminants	https://portal.helcom.fi/meetings/HELCOM%20PICE%20HZ%20WS%201-2017-426/default.aspx
	Workshop materials: Eutrophication	https://portal.helcom.fi/meetings/HELCOM%20PICE%20Eutro%20WS%201-2017-424/default.aspx
	Workshop materials: Baltic Sea Impact Index	https://portal.helcom.fi/meetings/HELCOM%20PICE%20BSII%20WS%201-2017-427/default.aspx
1.2.3 Follow-up on the guidance and recommendations from Contracting Parties, including possible adjustment to the assessment tools.	Corrections/modifications carried out according to outcome of State & Conservation 6-2017	NA
1.2.4 Finalize the thematic assessments, including visual presentation of results.	Thematic assessment on biodiversity	http://stateofthebalticsea.helcom.fi/wp-content/uploads/2017/07/HELCOM_The_integrated_assessment_of_biodiversity_supplementary_report_first_version_2017.pdf
	Thematic assessment on eutrophication	http://stateofthebalticsea.helcom.fi/wp-content/uploads/2017/09/HELCOM_The_integrated_assessment_of_eutrophication_Supplementary_report_first_version_2017.pdf
	Thematic assessment on hazardous substances	http://stateofthebalticsea.helcom.fi/wp-content/uploads/2017/07/HELCOM_The_integrated_assessment_of_hazardous_substances_supplementary_report_first_version_2017.pdf

		Assessment on cumulative impacts on the seafloor	http://stateofthebalticsea.helcom.fi/pressures-and-their-status/seabed-loss-and-disturbance/
1.3	Further design of web pages for building interest and presenting the assessment results		
	Task	Deliverable	Deliverable URL / Deliverable document
	1.3.1 Design of the assessment web pages, for the purpose of building interest and presenting the assessment results.	Website implementation according to design specifications	http://stateofthebalticsea.helcom.fi/ Document Deliverables_1-3-1 (Website design wireframe, Visual design)
	1.3.2 Design and creation of high-quality visualizations of the main results.	Several visualizations carried implemented as infographics and map images	Main result infographics and figures in http://stateofthebalticsea.helcom.fi/ Document Deliverables_1-3-2 (Infographics and maps, including style defintions)
	1.3.3 Visual outlook for figures (both print and online).	Visual outlook applied in graphs and maps.	Document Deliverables_1-3-3 (Style guidelines for figures, typeface and colour style defintions)
1.3.4 Interactive web-based chart/figure tool; as well as the design of summary publications of the results, released both print and online.	Implementation of dynamic chart tool (Excel services) in multiple core indicator results pages.	Dynamic embedded map viewer tool: E.g. Figure 4.1.3 in: http://stateofthebalticsea.helcom.fi/pressures-and-their-status/eutrophication/ Dynamic chart tool: E.g. Long term changes interactive chart applied in: http://www.helcom.fi/baltic-sea-trends/indicators/chlorophyll-a/results-and-confidence/	

			<p>Document Deliverables_1-3-4_1 (Summary report layout)</p> <p>Document Deliverables_1-3-4_2 (Embedded map viewer source code)</p> <p>Summary report PDF http://stateofthebalticsea.helcom.fi/wp-content/uploads/2017/07/HELCOM_State-of-the-Baltic-Sea_First-version-2017.pdf</p>
2	2.1.1.a	Report on the analysis of compiled beach litter data and proposals for setting preliminary beach litter baselines in the Baltic Sea	
2	2.1.1.b	Identification of top litter items in the Baltic Sea region	
2	2.1.2	Litter on the seafloor in the HELCOM area- analyses of data from BITS trawling hauls 2012-2016	
2	2.1.3	Report on the analysis of compiled data on microlitter in the Baltic Sea	
2	2.3.1	Analysis of different marine litter databases	
3	1	Developing the ecosystem service approach in the ESA framework	
3	2	Recommendations on regional economic and social analyses for European marine areas	
3	3	Development of a regional “business-as-usual” scenario (BAU) to be used as a baseline in the integrated assessment of the marine environment	
3	4	Developing tools towards integrated assessment of the marine environment	
4		Guidelines for assessment of lost, disturbed and adversely affected area of benthic and pelagic habitat types.	
4		Guidelines on how to integrate different levels of habitat classifications (broader and more detailed).	
4		Report with proposed definition of adversely affected habitats based on testing.	
4		Specification of extent loss and disturbed habitats for relevant data sets	
4		Report on cross-comparison of the area lost or disturbed against status assessments under different regimes (EU WFD, EU HBD, MSFD, HELCOM HOLAS I/II or core indicators)	
4		Draft assessment of status of habitats based on proposed thresholds.	
4		Proposal how the tested scenarios would support the development of environmental targets.	

5. List of workshops

Outcome of workshops under the project, including participant lists and are provided in **Appendix 2**.

Theme and workshop	Purpose of the meeting	Dates	Location
1 HELCOM SPICE Eutrophication workshop	The aim of the workshop was to review, verify and summarize the results of the integrated assessment of eutrophication to be presented in the 'State of the Baltic Sea' report.	14 March 2017	HELCOM Secretariat, Helsinki, Finland
1 HELCOM SPICE Biodiversity workshop	The aim of the workshop was to review, verify and summarize the results of the integrated assessment of biodiversity to be presented in the 'State of the Baltic Sea' report.	15 March 2017	HELCOM Secretariat, Helsinki, Finland
1 HELCOM SPICE Hazardous substances workshop	The aim of the workshop was to verify and summarize results for the integrated assessment of hazardous substances to be presented in the 'State of the Baltic Sea' report developed under the HOLAS II project.	16 March 2017	HELCOM Secretariat, Helsinki, Finland
1 HELCOM SPICE Baltic Sea Impact Index workshop	The aim of the Workshop was to verify and summarize results for the cumulative impact assessment of HOLAS II which is assessed using the Baltic Sea Impact index.	21 March 2017	HELCOM Secretariat, Helsinki, Finland
2 HELCOM SPICE workshop on microlitter	The aim of the workshop was to discuss the results achieved through Theme 2 of the SPICE project, aiming at developing marine litter indicators towards operationalization and prepare a proposal for the assessment of marine litter in HOLAS II. The focus of workshop was on microlitter: <ul style="list-style-type: none"> - sampling environments (i.a. water surface, water column, sediment, biota), - options for sampling (i.a. manta trawl, Baby-Bongo net, box corer), and - analytical methods (i.a. stereo microscopy, Raman, FTIR, chemical digestion, enzyme digestion). 	7-8 November 2017	HELCOM Secretariat, Helsinki, Finland

<p>3 HELCOM workshop on economic and social analyses supported by the SPICE project</p>	<p>The aim of the workshop was to contribute to the development of economic and social analyses (ESA) in the Baltic Sea Region, with a particular focus on the ongoing work in the HELCOM SPICE project.</p>	<p>1 November, 2017</p>	<p>The Ministry of Environmental Protection and Regional Development, Riga, Latvia</p>
<p>3 HELCOM – BONUS BALTICAPP regional workshop on the use of ecological–economic research to support and improve marine policy implementation in the Baltic Sea region</p>	<p>The overall objective of the workshop was to build understanding about how the ongoing ecological-economic research can support marine policy implementation and integrated management, focusing on the Baltic Sea.</p>	<p>29-30 March, 2017</p>	<p>Stockholm University, Sweden</p>
<p>3 HOLAS II ESA workshop</p>	<p>The aim of the workshop was to verify and recommend on economic and social analyses (ESA) to be presented in the State of the Baltic Sea report. The report summarized the results of the second HELCOM holistic assessment of ecosystem health of the Baltic Sea (HOLAS II), and the first version of the report was made available in June 2017.</p>	<p>31 March, 2017</p>	<p>Baltic Sea Centre, Stockholm University, Stockholm, Sweden</p>
<p>4 HELCOM SPICE Workshop on Cumulative Impacts and Maximum allowable pressures on Habitats (HELCOM SPICE CIM WS 1-2017)</p>	<p>The aim of the workshop was to discuss the results achieved so far under Theme 4 of the SPICE project, to further develop the method for assessing the extent of lost and disturbed underwater habitats, as well as to advance the work on the approach to define threshold values allowing for assessment of environmental status. The main emphasis of the workshop was to collect input to support the ongoing work related to the definition of threshold values for benthic habitats, adapted to the different characteristics within each region or subregion. The workshop further focused on the more theoretical discussion of <i>how thresholds could be used when setting common approaches for the establishment of environmental targets</i>.</p>	<p>27-28 of September 2017</p>	<p>HELCOM Secretariat, Helsinki, Finland</p>

6. Abbreviations of HELCOM groups and projects mentioned in the report

HELCOM/Groups/Working Groups:

HELCOM: Helsinki Commission. Meets annually, with the Heads of Delegation (HOD) representing the Contracting Parties: Denmark, Estonia, the European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.

HOD: Heads of Delegation. Representatives of the Contracting Parties. Heads of Delegation are the people representing their respective party. In addition to the annual Commission meetings, the Heads of Delegation meet at least twice a year.

STATE & CONSERVATION: Working group on the State of the Environment and Nature Conservation, covers monitoring and assessment functions as well as issues related to nature conservation and biodiversity protection.

GEAR: Working group on the implementation of the ecosystem approach, covers the strategic implementation of the Baltic Sea Action Plan as well as the regional requirements under the MSFD for those Contracting Parties which are also EU member states .

Projects, expert groups and intersessional activities:

HOLAS II: Project for the development of the Second holistic assessment of Ecosystem Health of the Baltic Sea (2014-2018). The project is led by a “core team” with representatives from the Contracting Parties.

EN-Marine Litter: HELCOM Expert Network on Marine Litter. The aim of the group is to support the regional development of monitoring methods and indicators for marine litter.

Other:

HELCOM HUB: HELCOM Underwater Biotope and Habitat classification system. Created to support a common understanding of the Baltic Sea biotopes, habitats and communities. The classification has been constructed to be compatible with the European Nature Information System (EUNIS).

HELCOM MADS: HELCOM Map and Data Services, contains spatial data collected within HELCOM data collection framework and related projects as outlined in [HELCOM Monitoring and Assessment Strategy](#).