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Background

This document summarizes the status of the ongoing HELCOM projects and external projects with HELCOM participation, with a focus on their main achievements and outcomes during 2016. Projects finalized in 2016 are listed separately.

Action required

The Meeting is invited to take note of the information.

Information on on-going HELCOM projects and external projects with HELCOM involvement

1. [Zooplankton Indicator Integration to Monitoring in the Baltic Sea \(HELCOM ZEN ZIIM\), 2015-2017](#)

Chairman: Ms. Elena Gorokhova, Sweden

The overarching aim of the project is to promote zooplankton-based indicators to follow-up the implementation of the Baltic Sea Action Plan, and MSFD as far as EU countries are concerned, and to support the international Baltic regional zooplankton monitoring. The main activities are training courses/workshops; revising and updating the zooplankton analysis methods, with a particular focus on taxonomic and biomass assessment; and evaluating and operationalizing zooplankton-based indices as environmental indicators.

During 2016, the ZEN ZIIM project has continued work on developing the core indicator on 'Zooplankton mean size and total stock', including the development of associated threshold values, which is still ongoing for some assessment units. The project has contributed to the second holistic assessment of the Baltic Sea (HOLAS II) project, i.e. updated core indicators and provided information for the assessment tool and contributed to a survey of HELCOM knowledge and research needs for achieving good environmental status. The project has worked on revision and update of biomass factors, data flow arrangements with ICES, and is leading the revision on HELCOM monitoring guidelines on zooplankton currently undertaken by the State and Conservation Working Group.

The ZEN-ZIIM project held its annual meeting on 24-25 November 2016 in Stockholm, Sweden.

2. [Quality assurance of phytoplankton monitoring in the Baltic Sea \(HELCOM PEG QA\), 2017-2019](#)

Project Manager: Ms. Iveta Jurgensone, Latvia

The project is a continuation of '[Quality assurance of phytoplankton in the Baltic Sea \(HELCOM PEG\)](#)' that was implemented in 2014-2016.

The main focus of the project is to ensure and maintain high quality standard of the international Baltic Sea regional phytoplankton monitoring within the HELCOM. This is achieved e.g. by organizing annual training courses (workshop), maintaining the PEG phytoplankton biovolume list, and organizing intercalibrations. The project leads the revision of the HELCOM monitoring guidelines for phytoplankton currently undertaken by the State and Conservation Working Group.

The project also serves as a platform for the review of phytoplankton indicators developed by Lead Countries and dedicates part of annual meetings to this topic. The project furthermore supports the definition of data requirements for phytoplankton indicators and appropriate data reporting format to ensure that the COMBINE database hosted by ICES provides the data needs for HELCOM phytoplankton indicators.

The project has contributed to the second holistic assessment of the Baltic Sea (HOLAS II) project, i.e. updated core indicators and provided information for the assessment tool and contributed to a survey of HELCOM knowledge and research needs for achieving good environmental status.

The annual meeting in 2016 was held Warnemünde, Germany (25-29 April 2016). The annual meeting in 2017 will be held in St Petersburg, Russia, 3-7 April 2017. During the meeting a one day training course on diatoms is planned.

3. Baltic-wide assessment of coastal fish communities in support of an ecosystem-based management (HELCOM FISH-PRO II), 2014-2018

Project Manager: Mr. Jens Olsson, Sweden

This project continues the work of the HELCOM projects 'Expert network on monitoring and protecting of coastal fish and lamprey species (HELCOM FISH Project), 2008-2010,' and 'Project for Baltic-wide assessment of coastal fish communities in support of an ecosystem-based management (HELCOM FISH-PRO) 2011-2013'.

The objectives of the project are as follows:

- Knowledge: to update and improve knowledge about occurrence, distribution, population and threat and/or decline of coastal fish based on all relevant data.
- Assessment and monitoring: to further develop different assessment and monitoring methodologies for coastal fish, including indicators with targets and reference values.
- Recommendations: provide advice to national authorities and ongoing HELCOM work on implementation of coastal fish related actions in the BSAP and MSFD.

During the year 2016, the project held its annual meeting in February ([Outcome of FISH-PRO II 3-2016](#)) and has *inter alia*:

- worked on elaboration of the third thematic assessment of coastal fish status
- contributed to the development and operationalization of the HELCOM core indicators on coastal fish
- contributed to the second holistic assessment of the Baltic Sea (HOLAS II) project, i.e. updated core indicators and provided information for the assessment tool
- contributed to the BalticBOOST project, including development of a database and data arrangements for coastal fish, and
- contributed to a survey of HELCOM knowledge and research needs for achieving good environmental status.

In addition, the Project Manager participated in the meetings of FISH 4-2016, FISH 5-2016 and the HELCOM workshop on fish related indicators (FISH IND WS 1-2016).

4. Sixth Baltic Sea Pollution Load Compilation (HELCOM PLC-6), 2012-2017 and Seventh Baltic Sea Pollution Load Compilation (HELCOM PLC-7), 2017-2020

Project Manager: Mr. Lars Svendsen, Denmark

The project is an implementation of HELCOM Recommendation [26/2](#) to periodically carry out a pollution load assessment (PLC) including a quantification of waterborne point, diffuse and natural sources.

The overall task of the project is to prepare a comprehensive assessment of the water- and airborne inputs and their sources to the Baltic Sea during the period 1994-2014 with more detailed assessment for 2012 (Germany and Poland) and 2014 (the remaining countries) by:

- updating the 5th Pollution Load Compilation (PLC-5) and the updated PLC report submitted to the 2013 HELCOM Ministerial Meeting (PLC-5.5), including information on nutrient inputs via air and water, as well as their sources;
- further updating the PLC Guidelines and extending them with new standardized methods, standard values, statistical assessment for improving data quality and quantifying uncertainty on national datasets to ensure more complete, consistent and comparable data between Contracting Parties, and complying with new requirements for follow-up of the fulfilment of nutrient input reduction targets agreed upon within HELCOM.

The update of the PLC Guideline was completed in 2015 and the updated version was published at the HELCOM website. National data on inputs of nutrients have been collected in general using the WEB

reporting application elaborated by PLUS project. At the moment the data reported by countries cover period from 1995 to 2014. The data are still require verification, filling data gaps in and correction some erroneous parameters.

Based on the collected data the procedure of the assessment dataset elaboration has been recently launched. National assessment datasets will be reviewed and approved by national data reporters using the survey established at the HELCOM workspace. The results will be discussed at the MAI CART workshop which will be held in March 2017 in Stockholm.

The data on airborne input of nitrogen and hazardous substances into the Baltic Sea sub basins have been reported by EMEP. The data also includes evaluation of contribution of different sources into the total input of oxidized and reduced nitrogen.

Simultaneously to the compilation of the data on input of nutrients the background information and spatial data for visualizing of the project results are being collected. There are still remarkable gaps in the national data reporting.

A preliminary assessment data to follow up implementation of the HELCOM nutrient reduction scheme will be available for discussion by PRESSURE 6-2017. The data on source apportionment and input of hazardous substances as well as other PLC-6 products will be released later this year. The project products will be released for national reviewing subsequently when they are ready but not compiled in the single report.

The implementation of the PLC-7 project which had been recently approved by HOD 51-2016 was launched in January 2017. The project activities were started from reporting national data on input of nutrients in 2015. Update of the PLC Guideline preparation for national labs intercalibration and other activities are planned for 2017.

5. Operationalization of the nutrient reduction scheme follow-up system (MAI-CART OPER), 2015-2017

Project implemented by: Bo Gustafsson, Baltic Nest Institute Sweden in cooperation with Lars Moeslund Svendsen, Danish Centre for Environment and Energy Denmark

The aim of the project is to improve the currently laborious and manual production of the assessment of implementation of the nutrient reduction scheme (Maximum Allowable Inputs and Country-Allocated Reduction Targets) and automate as many steps in the assessment as feasible and possible. Expert judgment will always be indispensable part of the assessment process, as in case of other HELCOM core indicators and their assessment, however, partial automation can save time and resources.

The main steps foreseen to be operationalized and automated will be the establishment of the assessment data set comprising of PLC and EMEP data, performing basic data processing such as normalization and statistical analysis, and form the final assessment dataset consisting of standard tables with the assessment results.

The tools elaborated by the MAI-CART OPER project will be tested on the assessment dataset which is one of the PLC-6 products. As it was suggested by the kick of workshop of the MAI CART OPER project, the assessment dataset will be established and approved by the national reporters using the survey established in the HELCOM workspace. The survey integrates an option to correct the assessment results by the national reporters and report the corrected data back to the PLC-6 project team. The MAI CART OPER toolkit will be tested in cases when an instant update of the whole assessment dataset will be needed due to data corrections. The results of the tests will be presented and discussed at PRESSURE 6-2017.

6. Agri-environment function in the HELCOM Secretariat (HELCOM AGRI-ENV), 2015-2017

Agri-environment coordinator: Ms Susanna Kaasinen, HELCOM Secretariat

To support the work of the HELCOM Group on Sustainable Agricultural Practices in implementing its work programme and the lead countries in their specific topics as well as to contribute to the overall theme of nutrient recycling, Agri-Environment Coordinator has been employed in the HELCOM Secretariat.

In spring 2016, the Agri-Environment Coordinator prepared for the AGRI 3-2016 meeting that was held on 5-6 April in Tartu, Estonia. The coordinator also helped to prepare a project concept note on manure standards for the first part of the 2nd Call of the Interreg Baltic Sea Region funding cooperation. The concept note was submitted in May 2016. In summer 2016, the coordinator helped the lead countries Finland and Germany to compile an overview of nutrient recycling in the Baltic Sea countries, which was finalized in September 2016. In autumn 2016, the coordinator together with the project consortium prepared the actual project proposal on manure standards which was submitted to the Interreg Secretariat in January 2017. The coordinator also helped the lead countries to plan for a HELCOM Workshop on nutrient recycling in the Baltic Sea countries that will be held on 27-28 March 2017 in Berlin, Germany.

7. Assessment of Maritime Activities in the Baltic Sea, 2016-2017

Coordination: Mr. Hermanni Backer, HELCOM Secretariat

The Maritime Assessment project was approved by HOD 49-2015. The project will enable supporting the production of the HELCOM Maritime Assessment.

The specific expertise and issues where project support is needed will be selected according to need but likely include traffic statistics, shipping accidents, submerged hazardous objects, interactive online visualisation of compiled data as well as lay-out and printing costs of a summary/brochure.

The maritime assessment will rely heavily on statistics, figures and maps and less on text. A key source of this information is the AIS data on ship movements collected in the region during 2005-2015. Due to this, one of the most work-intensive part of the assessment will be on compilation of reliable datasets.

The main assessment document will cover all maritime activities and uses of the sea. The main focus will be on the developments during the period 2005-2015. In addition to the main assessment document the aim is to produce a summary publication which will be printed. This publication will try to crystallise the messages emerging from the main document in easily understandable format.

Due to the technical issues related to the data processing the publication has experienced delays from the original timeplan.

A draft of the publication will be available in May 2017. A finalized publication is foreseen by autumn 2017.

8. Open-source tools for regional risk assessments to improve European preparedness and response at sea (OPENRISK), January 2017 - January 2019

Mr. Hermanni Backer, Professional Secretary, HELCOM Secretariat

Project Manager: Mr. Valtteri Laine, HELCOM Secretariat

Total budget 529.956 €, EU-co-financing 396.467 €

Lead partner HELCOM, other partners World Maritime University/ WMU (Intergovernmental), MARIN (Netherlands), SYKE (Finland).

The HELCOM-led OPENRISK Project, co-financed by the EU – Civil Protection Financial Instrument (2017-2018, DG ECHO PREV/2016/26), will take the first steps in drafting an optimized and open method toolbox for frequent regional Pollution Prevention and Response risk assessments.

Maritime risk assessments are vital to promoting risk-based decision-making in preparedness and response and to optimise resources. Even if such assessments are commonly carried out on a national basis recently also regional risk assessments have been carried out to ensure adequate response capacity within the HELCOM area and within other European sea regions.

These have been carried out via externally funded projects and complementary activities including: HELCOM BRISK (EU) and BRISK-RU (NCM) in the Baltic (2009-2012), BONN BE-AWARE I and II in the greater North Sea (2012-2014) and REMPEC MEDESS-4MS in the Mediterranean (2012-2015).

Current practices, however, must be improved. Recent national and regional risk assessments have been successful, but largely one-off, projects. This one-off nature does not allow following how the risks of accidents, and pollution, develop over time and in space - or how efficient the measures have been.

New approaches enabling high frequent risk assessments with a low cost are greatly needed to unleash the full potential of risk assessments within regional intergovernmental PPR organizations.

The OPENRISK Project aims to build on the outcomes of successfully completed projects and engage in close cooperation with other regional seas cooperation structures with a Preparedness and Response mandate for coherent and improved risk assessments across European Seas.

9. Second holistic assessment of Ecosystem Health of the Baltic Sea (HELCOM HOLAS II), 2014-2018

Project Coordinator: Ms. Lena Bergström, HELCOM Secretariat

Project Manager for continued development of HELCOM Core Indicators (2015-2016): Lena Avellan, HELCOM Secretariat

HOLAS II started in 2014 and will continue until June 2018. The project will produce an update of the overall environmental status of the Baltic Sea and evaluate progress in relation to the goals of the Baltic Sea Action Plan (BSAP). The outcome of the project will be developed so that it can also be used in reporting under the EU Marine Strategy Framework Directive (MSFD). A first version of the 'State of the Baltic Sea' report (HOLAS II) will be produced by June 2017 and an updated and final version will be produced by June 2018.

The main components of the assessment are:

- Distribution of human activities and pressures in the Baltic Sea. Cumulative impacts are assessed using the Baltic Sea Pressure and Impact Index.
- Assessment of good environmental status using core indicators, and integrated assessments of Biodiversity, Eutrophication, Hazardous substances.
- Economic and social analyses to support regional assessments of the use of marine waters and cost of degradation.
- Measures to reach good environmental status

Methods and tools for the status assessment for use in HOLAS II have been developed through the EU co-financed projects BalticBOOST and TAPAS. The HELCOM core indicators form the basis for the assessment of environmental status. The further development of HELCOM core Indicators is part of HOLAS II preparation. This process, continuation to [CORESET II](#), is to ensure that a comprehensive set of core indicators are operational for use in the 2nd HELCOM holistic assessment. During 2016 the assessment tools and a new set of core indicators and associated thresholds values have been agreed (HOD 51-2016).

The project is guided through a Core team with nominated participants from the Contracting Parties. The project held two core team meetings and eight workshops under the BalticBOOST and TAPAS projects in 2016 to support the developments of the biodiversity and hazardous substance assessment tool, the assessment of human activities and pressures, as well as the Economic and social analyses. The work in spring 2017 will be focused on data collation, implementing the assessment tools, drafting the first version of the 'State of the Baltic Sea' report. The draft report will be presented for technical review by State and Conservation 6-2017 (15-19 May 2017) and for adoption at HOD 52-2017 (20-21 June).

Indicators are to be developed jointly by Lead and co-lead countries, with Lead countries taking initiative for the continued work, and reviewed and agreed by the Contracting Parties in relevant HELCOM groups (as agreed at HOD 48-2015 para 3.64). Lead Country offers have been received for the continued development of some 30 indicators and co-Lead country offers were received for all indicators. However, lack of Lead country offers are notably on indicators related to benthic communities and hazardous substances.

One of the key tasks of the HELCOM expert groups will in the future include carrying out the regular updates of indicator reports and to provide timely indicators evaluations for HELCOM assessments. Updated indicator evaluations are needed in early 2017 and early 2018 to provide for finalization of the first results of HOLAS II by mid-2017 and of the updated HOLAS II by mid-2018 and the associated core indicator reports need to be updated accordingly.

A complementary science editing project, funded by Germany, was established to synthesize the top key messages based on more detailed assessment results in order to ensure that the main messages are clear and understandable.

10. Development of HELCOM tools and approaches for the Second Holistic Assessment of the Ecosystem Health of the Baltic Sea (TAPAS), January 2016 - June 2017

Overall coordination by the HELCOM Secretariat (Ulla-Li Zweifel, Professional Secretary)

This is a HELCOM project funded through a direct EU grant.

Total budget: 418.221 €, EU-co-financing 250.000 €

Project partners: HELCOM (lead), SYKE (Finland), NIVA DK (Denmark), EMI TU (Estonia), ICES and SEI Tallinn (Estonia).

HELCOM TAPAS aims to support the [HOLAS II project](#) in its development of the Second Holistic Assessment of the Ecosystem Health of the Baltic Sea and is structured around four themes. .

Theme 1 - Baltic Sea pressure and impact indices (BSPI/BSII). These indices, firstly developed as part of the Initial HELCOM holistic assessment published in 2010, has been further developed through TAPAS, including improvements to the consideration of temporal and spatial aspects of pressure as well as improvements to the impact weight scores that are used to estimate the potential impact of each assessed pressure on specific ecosystem components. Two HELCOM TAPAS workshops were held in 2016 to guide the project activities. The updated method to calculate the BSPI/BSII was agreed for use in HOLAS II at HOD 51-2016.

Theme 2 - Spatial information on ecosystem components. The development of the BSPI/BSII as well as other HELCOM activities (e.g. Red list assessment, indicator development) requires availability of data on spatial distribution of specific ecosystem components. In TAPAS, Baltic-wide distribution maps of benthic species and habitats as well as mobile species have been developed and have been reviewed by the Contracting Parties in 2016 as part of the data approval process of the HOLAS II project. Under this theme a HELCOM indicator for assessing the distribution, pattern and extent of benthic biotopes ('Condition of benthic biotopes') has also been further developed. One HELCOM TAPAS workshop was held in 2016 to guide the development of the indicator and the outcome of the project was presented to State and Conservation 5-2016. The indicator will be further developed towards a core indicator in 2017 by Lead Country Estonia.

Theme 3 - Framework for economic and social analyses (ESA) in the Baltic Sea region. This TAPAS theme has developed and tested of a common conceptual framework for economic and social analyses in the Baltic Sea. Two HELCOM TAPAS workshops were held in 2016 to guide the project activities. The results of the project will be considered by the HOLAS II core team for inclusion in the 'State of the Baltic Sea' report.

Theme 4 - Workspaces for data and information access. The fourth specific objective is to establish and test workspaces on the HELCOM website as a possible technical means for making assessment data and information available online enabling open access and efficient reuse of the collected data. This technical solution is an extension to the existing HELCOM Map and Data service infrastructure, hosted by the HELCOM Secretariat.

The TAPAS project is guided by the HOLAS II project core team, with representation from the Contracting Parties, and HELCOM Working Groups State and Conservation and Pressure. Themes 1, 2 and 3 finalized the activities in December 2016 while Theme 4 continues its activities until June 2017.

11. 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 (SPICE), 2017

Overall coordination by the HELCOM Secretariat (Ulla-Li Zweifel, Professional Secretary)

SPICE is a HELCOM coordinated project that is co-financed by the EU.

Total budget: 489.010 €, EU co-financing 391.208 €.

Partners: HELCOM. Finnish Environment Institute (SYKE), Swedish Agency for Marine and Water Management (SwAM), University of Tartu, Estonia (EMI), Polish Institute of Meteorology and Water Management (IMGW) and Stockholm Environment Institute Tallinn Centre, Sweden (SEI Tallinn).

The SPICE project will contribute directly to the finalization of the 'State of the Baltic Sea' report (HOLAS II), the development and operationalization of HELCOM core indicator on marine litter, further development and implementation of economic and social analyses at the Baltic Sea regional scale, and development of assessments of cumulative impacts and thresholds related to pelagic and seabed habitats.

The project is organized according to four themes.

Theme 1- Finalization of HOLAS II. Under this theme work will be undertaken to ensure that data requested from the Contracting Parties are harmonized, made available, and quality assured for use in the status assessments of HOLAS II. A key component of this theme is to also to carry out the integrated assessments developed under the BalticBOOST and TAPAS projects. The project will prepare assessment results and background materials for a set of HELCOM SPICE workshops that are organized to verify the results and agree on draft key messages to be included in the 'State of the Baltic Sea' report. Invitations to the workshops have been sent out to the HOLAS II core team, State and Conservation, Pressure and Gear Group. Dates for the workshops are:

- Eutrophication assessment: 14 March 2017
- Biodiversity assessment: 15 March 2017
- Hazardous substances assessment: 16 March 2017
- Baltic Sea Impact index: 21 March 2017

All workshops will be held at the premises of the HELCOM Secretariat, Helsinki, Finland.

A final component of the theme is to contribute to the visual presentation of results and setting up a website for the first version of 'State of the Baltic Sea' by June 2017.

Theme 2- Marine litter baselines and assessment in the Baltic Sea. The theme is aiming at define a baseline for beach litter in the Baltic Sea region, based on existing data, either at regional or subregional scale. The establishment of a baseline will support the further development of threshold values for the indicator on beach litter as well as support the follow-up of HELCOM recommendation 'Regional Action Plan on Marine Litter (RAP ML)'. The possibilities to define a baseline for litter on the seafloor in the Baltic Sea region are even more limited by data but will also be explored. For microliter, for which development of indicators has only recently begun in HELCOM, the project will compile and analyse available information from national monitoring and research projects in the Baltic Sea, aiming at a future harmonisation of data collection protocols.

Although marine litter indicators are not yet operational for use in the 2017 version of HOLAS II, the project will propose a descriptive marine litter assessment component of HOLAS II based on existing data.

The theme will furthermore identify the best option for setting up regional databases for beach litter and micro litter.

A HELCOM SPICE workshop will be arranged for presenting and discussing the outcomes of project. The workshop will focus on sharing of experiences and increasing cooperation between the microliter experts in the region and will tentatively be held in November 2017.

Theme 3- Economic and social analyses. The theme builds on the progress of the HELCOM TAPAS project and will compile data on the use of marine waters and cost of degradation to operationalize the methodology developed in TAPAS and conduct a regional ESA for the Baltic Sea to be considered for HOLAS II. The project will also develop the ecosystem services approach in the economic and social analyses.

A joint regional baseline (business as usual, BAU) will be developed. The BAU depicts the development in the state of the marine environment in the case that Programmes of Measures are not implemented. It considers also future development trends of marine uses and policies impacting the marine environment. The BAU is needed for proper assessment of the gap to be closed by new measures for achieving good environmental status (GES), and it is relevant also to follow progress of implementation of the Programmes of Measures and achieving environmental targets.

Another topic addressed under Theme 3 is how to use existing ecological and economic tools and data in the Baltic Sea area to evaluate human activities, pressures, state and socio-economic impacts on human well-being in a common framework. Such integration is needed to assess the social and economic consequences of pressures and management measures, and is also highly relevant for marine spatial planning.

A HELCOM SPICE workshop will be arranged for presenting and discussing the results with the Baltic Sea ESA network as well as experts from other Regional Sea Conventions and other interested parties. The workshop will be held in autumn 2017.

Theme 4 – Cumulative impacts and maximum allowable pressures on habitats.

The HELCOM Baltic Sea Pressure Index and Impact Index (BSPII), which was further developed and improved through the TAPAS project, can be used to estimate human activities and the cumulative pressures and impacts on marine environment. However, it does not have validated linkages to the state of the benthic and pelagic habitats and hence it does not allow estimates of the status of these ecosystem components. Under this theme, different approaches will be tested and developed to define scales and threshold values for good status in the assessment of benthic and pelagic habitats. The project activities will include cross-comparison of area lost or disturbed against status assessment under HELCOM and different EU Directives and by testing thresholds for assessment habitats at different geographic scales. The activities under Theme 4 will primarily provide results in a timeframe that could contribute to the updated and final version of HOLAS II by mid-June 2018.

Based on the results, the theme will propose how the thresholds can be applied for the further development of environmental targets as initiated under the BalticBOOST project.

A HELCOM SPICE workshop with representatives from the Contracting Parties will be held to guide the project activities, tentatively in September 2017. Invitations will also be extended to experts from other RSCs.

The SPICE project is guided by the HOLAS II core team and relevant HELCOM Working Groups. On line kick-off meetings for the respective themes were held in January 2017. An inception report outlining the methodology and planned steps was submitted to the EC 31 January 2017.

12. Horizontal Action “Spatial Planning” Support (HASPS I and II), April 2015 - June 2016, continuation July 2016 - June 2018

Project Coordinator (in 2015-2016): Ms. Leena Laamanen, HELCOM Secretariat

Funding for this activity has been granted through the Interreg Baltic Sea Region Programme.

Total budget (VASAB and HELCOM) HASPS II 235.288 €, EU co-financing 199.995 €

The HASPS project aims to support objectives assigned in the HA Spatial Planning of the EUSBSR, co-lead by HELCOM and VASAB. The project involves related activities of both partners to improve coordination, stakeholder involvement and achievement of the strategic targets of the HA Spatial Planning. The project supports implementation of the Regional Baltic MSP Roadmap 2013-2020 adopted by HELCOM and VASAB. The project adds capacity to the joint HELCOM-VASAB MSP WG (established in 2010) to act as a regional platform for coherent MSP activities. HASPS supports the work of the Baltic Sea Region MSP Data Expert Sub-Group, improve coordination and visibility of HA Spatial Planning.

During 2015-2016 information and sources on regional spatial datasets and their potential use for MSP and assessment of human activities was collated. Together with information collation, activities enhancing visibility and visualisation of MSP relevant datasets has been undertaken. MSP data sharing has been promoted and supported through the Baltic Sea Region MSP Data Expert Sub-group. The project has also presented and promoted HA Spatial Planning in several meetings.

13. Towards coherence and cross--border solutions in Baltic Maritime Spatial Plans (Baltic SCOPE), March 2015 - March 2017

HELCOM contact point: Mr. Hermann Backer, HELCOM Secretariat

This was an external project with HELCOM involvement, financed through a grant from EASME/EMFF.

Total budget 2.638.828 €, EU-co-financing 2.111.063 €

Lead partner SWAM (Sweden), other partners (apart of HELCOM) BSH (Germany), UMS (Poland), DNA (Denmark), MoEPRD (Latvia), Estonian Ministry of the Interior, State Regional Development Agency (Latvia), HELCOM, Nordregio (Sweden) and SYKE (Finland).

The main purpose of the project was to find planning solutions to transboundary issues and improve Maritime Spatial Planning (MSP) processes. HELCOM was one of the ten partners working on the two case studies of the project: one in the southwest Baltic Sea and the other between Estonia, Latvia and Sweden.

The HELCOM Secretariat contribution to the project was to explore more efficient use of HELCOM AIS data in Maritime Spatial Planning. This included the production of statistics and high resolution data products on ship traffic and its environmental pressures/risks based on AIS signals received within the Baltic Sea region. In addition to MSP such information can be used in a more regular forms of regional risk assessments related to maritime traffic including risks of spills. During spring 2015, the HELCOM Secretariat carried out interviews with AIS users from the Contracting Parties, Norway and the European Marine Safety Agency. The aim of these interviews was to have a better understanding of the best available working procedures, software and hardware for processing AIS data. It was also the opportunity to gather ideas what type of products the HELCOM Secretariat could generate from the AIS data. The Secretariat has collected these experiences to an AIS best practices document which was submitted to the HELCOM AIS EWG Meeting in May 2016.

During May 2015- January 2016, the Secretariat has used these best practices and processed AIS data for SCOPE and also for other regular HELCOM activities. The Secretariat has also used this processed material in ship density maps for the partners according to specifications and needs. Statistics about shipping activities in the Baltic Sea can be generated based on this material. A data viewer for the output of this MSP relevant AIS map material was developed in parallel in the HASPS project.

The SCOPE project also started preparing material to be in the position to publish a section dedicated to MSP and maritime activities in the upcoming HELCOM Maritime Assessment (to be published early 2017).

14. [EnviSuM - Environmental Impact of Low Emission Shipping: Measurements and Modelling Strategies, 2016 – 2019](#)

This is an externally funded project with HELCOM involvement, financed through a grant from Interreg.

Total budget EUR 3.2 million, and the co-financing rate is 75%.

HELCOM contact point: Mr. Hermanni Backer, HELCOM Secretariat

Lead Partner University of Turku, other partners (apart of HELCOM): Finnish Meteorological Institute, Chalmers University of Technology, Maritime Development Center of Europe, Norwegian Meteorological Institute, Maritime University of Szczecin, Tallinn University of Technology, City of Gothenburg. University of Gothenburg, Baltic Marine Consult GmbH & Nordkalk Corporation. In addition, there are 17 associated organisations, including Russian partners.

This project is studying technical efficiency and socio-economic impacts of clean shipping solutions.

The EnviSuM project as a whole addresses measurement and modelling strategies to assess present and future cost and the health and environmental effects of ship emissions in view of the IMO SO_x emission regulations that entered into force in January 2015.

Available measures (fuels and abatement techniques) to meet the emission reduction targets will be investigated and their performance and level of compliance assessed. The EnviSuM project will provide tested and analyzed results on the efficiency of the different clean shipping solutions allowing the project consortium to make recommendations benefiting the environment, the health of the people of the Baltic Sea Region while still supporting the maritime businesses and promoting economic growth.

The planned HELCOM contribution to the project will be to ensure that the project results will contribute to the regional policy developments around clean shipping. This includes the HELCOM GREEN TEAM platform under the HELCOM Maritime Working Group.

15. [Baltic LINes - Coherent Linear Infrastructures in Baltic Maritime Spatial Plans, March 2016 - February 2019](#)

Project Coordinator: Mr. Manuel Frias, HELCOM Secretariat

Professional Secretary: Mr. Hermanni Backer, HELCOM Secretariat

Total budget 3,41 million €, EU co-financing from European Regional Development Fund: 2,67 million €

Lead partner Federal Maritime and Hydrographic Agency (DE)

Other partners: HELCOM, VASAB, Ministry of Energy, Infrastructure and State Development Mecklenburg-Vorpommern (DE), Swedish Agency for Marine and Water Management (SE), Maritime Office in Gdynia (PL), Maritime Institute in Gdansk (PL), Polish Offshore Wind Energy Society (PL), Coastal Research and Planning Institute (LT), Ministry of Environmental Protection and Regional Development (LV), University of Tartu (EE), Aalborg University (DK), Finnish Environment Institute (FI), Finnish Transport Agency (FI), NHTV University of Applied Sciences (NL)

Overall objective of the Project: to increase transnational coherence of shipping routes and energy corridors in Maritime Spatial Plans (MSP) in the Baltic Sea Region (BSR). This prevents cross-border mismatches and secures transnational connectivity as well as efficient use of Baltic Sea space. Thereby Baltic LINes helps to develop the most appropriate framework conditions for Blue Growth activities (e.g. maritime transportation, offshore energy exploitation, coastal tourism etc.) for the coming 10-15 years increasing investors' security.

The main project activities include:

- Developing requirements for MSP in relation to the shipping and energy sector in BSR;

- Harmonizing BSR MSP data infrastructure for shipping routes and energy corridors, drafting guidelines for MSP data exchange and dissemination;
- Identifying and agreement on transnationally coherent planning of linear infrastructures;
- Providing recommendations for a formalized BSR agreement on transboundary consultations on linear infrastructure within the MSP process.

Information on HELCOM projects finalized in 2016

1. [Baltic Sea project to boost regional coherence of marine strategies through improved data flow, assessments and knowledge base for development of measures \(BalticBOOST\), September 2015 - December 2016](#)

Overall coordination by the HELCOM Secretariat (Ulla-Li Zweifel, Professional Secretary)

This is a HELCOM project co-financed through a grant by the EU

Total budget: 792.065 €/Actual costs 710.556 €, EU-co-financing 80%

Project partners: HELCOM (lead), SYKE (Finland), NIVA DK (Denmark), EMI Utartu (Estonia), SLU Aqua (Sweden), FOI (Sweden), LFN (Latvia), NRM/SMNH (Sweden), TI-OF (Germany), DTU Aqua (Denmark), IOW (Germany) and ICES.

BalticBOOST is an EU co-financed project with the main goal to support the HOLAS II project through the development of tools and data arrangements to support assessments of the state of and pressures on the Baltic Sea. The project is also developing guidelines for setting of joint environmental targets for pressures affecting seabed habitats and underwater noise. The project furthermore supports the development of a follow-up system for HELCOM agreements.

The project is structured around five themes:

Theme 1, Biodiversity, has further developed a biodiversity assessment tool (BEAT) and improved data arrangements for the biodiversity elements (e.g. coastal fish, birds and seals) so that a comprehensive assessment of biodiversity in the Baltic Sea can be carried out by 2018. Two HELCOM BalticBOOST workshops were held in 2016 to guide the development of the biodiversity assessment tool. The biodiversity assessment tool developed under the project was agreed for use in HOLAS II at HOD 51-2016 and the databases are operational. Furthermore, the status of seal populations has been used as a case study to explore the possibility to align assessments under the HELCOM Baltic Sea Action Plan, MSFD and the Habitats Directive, and the outcome of the study was discussed at SEAL EG 10-2016.

Theme 2, Hazardous substances, has refined an existing HELCOM tool (CHASE) for assessing the status hazardous substances. Key components for adequate assessment of hazardous substances are to agree on matrices for indicators and to have access to quality assured data. Two HELCOM BalticBOOST workshops were held in 2016 to guide the development of the assessment tool. The hazardous substance assessment tool developed under the project was agreed for use in HOLAS II at HOD 51-2016.

Theme 3, Physical loss and damage to seabed habitats has focused on ways to determine how much disturbance from different activities specific seabed habitats can tolerate while remaining in Good Environmental Status (GES). On this basis, the project has proposed draft guidelines for defining environmental targets for pressures affecting seabed habitats. GEAR 15-2016 agreed to continue discuss at their next meeting how the outcome of the project can be further used in HELCOM. A tool for assessing the impacts of fishing gear on specific habitat types and species has also been developed and presented to the FISH group (FISH 5-2016). Two HELCOM BalticBOOST workshops were held in 2016 to guide the development of project activities.

Theme 4, Noise, focuses on underwater noise and has: (i) contributed to the development a regional registry of impulsive activities; (ii) identified spatial and temporal distribution of sound sensitive species and habitats in the HELCOM area (iii) explored and recommended principles for defining environmental targets for noise; (iv) surveyed possible measures to manage and mitigate relevant impacts on the Baltic Sea. A report on noise sensitive animals was agreed to be published as a HELCOM BSEP at HOD 51-2016. One HELCOM BalticBOOST workshop was held in 2016 to guide the work on environmental targets. The guidance for defining environmental targets for noise will be presented for consideration by HELCOM 38.

Theme 5, Joint documentation of PoMs, supported the development of a joint document on regional coordinated Programmes of Measures and a system to follow-up actions agreed by HELCOM. The follow-up system includes actions from the BSAP and Ministerial Declarations 2010 and 2013 and presents an online assessment of the status of implementation of HELCOM agreements. The product, [HELCOM Explorer](#), is available for public use since June 2016.

The project will deliver its final report to the European Commission by end of February 2017.

[2. Assessment and guidance for achieving an ecologically coherent network of HELCOM MPAs in the Baltic Sea \(ECONET\), 2015-2016](#)

Project Coordinator: Ms. Janica Borg, HELCOM Secretariat

This is a HELCOM project funded by the Nordic Council of Ministers.

Total budget: ca. 47,999€

The ecological coherence analysis of the Baltic Sea MPA network was initiated in early 2015. The assessment uses four main criteria, (representativity, replication, adequacy and connectivity), to evaluate the status of ecological coherence. A new quantitative approach for aggregating the results from the subcriteria analyses into the main result of the assessment was developed during the project. The results indicates improvements to the HELCOM MPA network, however, ecological coherence of the network has not yet been reached. The report was approved for publication as a HELCOM BSEP HELCOM 37-2016 and has been published as [BSEP 148](#).

**former acronym: HELCOM BSPAs*

[3. Making HELCOM eutrophication assessments operational \(HELCOM EUTRO-OPER EXTENDED\), 2016](#)

Project Manager: Ms. Vivi Fleming-Lehtinen, HELCOM Secretariat

The two-year project on 'Making HELCOM Eutrophication assessments operational (HELCOM EUTRO-OPER)' was finalized in 2015. During this time, the project developed an operationalized work flow for updating the eutrophication indicators and assessment.

HELCOM HOD 49-2015 welcomed the outcome of the EUTRO-OPER project and took note that the pre-core (candidate) indicators investigated and developed by EUTRO-OPER will not be finalized by end of the project and that in order to finalize them Lead Countries are needed to ensure their continued development as well as resources for modelling to develop GES-boundaries for three of the indicators. The Meeting noted the view of Finland, Germany and Sweden to continue the project in 2016 with support of a part-time project manager. The Meeting agreed to continue the project for a limited period and welcomed the offer by Germany to contribute to the work financially.

The 'Project on making HELCOM eutrophication assessments operational (EUTRO-OPER EXTENDED)' started in June 2016 as a follow-up of EUTRO OPER project and ended in December 2016.

Deliverables of EUTRO OPER EXTENDED include:

- Operationalization of the oxygen debt indicator as part of the eutrophication assessment work. The oxygen debt SAS algorithm was transferred to R script and utilized in ICES data center for COMBINE data.
- Finalization and target setting of HELCOM core indicator total nutrients.
- Finalization and target setting of HELCOM core indicator cyanobacterial bloom indicator and utilizing the PEG cyanobacteria biomass data in indicator calculation.
- Testing and further development of candidate indicator shallow water oxygen indicator
- Further development of HEAT 3.0 tool to be able to incorporate the new core indicators and to adjust the tool to the requirements of the revised Commission Decision

In addition, the project supported the work of IN-EUTROPHICATION group, which held 5 online meetings during 2016.