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<b>Document title</b>	Planning PLC-8 project
<b>Code</b>	3-8
<b>Category</b>	CMNT
<b>Agenda Item</b>	3 - Nutrient loads to the Baltic Sea ecosystem
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<b>Submitted by</b>	Secretariat
<b>Reference</b>	

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*Note that this document was submitted after the established deadline.*

*It will be decided by the Meeting whether the document can be discussed or is postponed to the next meeting.*

### Background

HELCOM 41-2020 approved PLC-8 project proposal. The project will start since July 2020 and the kick-off meeting is planned in Berlin, Germany 7-10 September 2020 combined with the 12<sup>th</sup> PLC-7 project meeting which is expected to be a closing meeting for PLC-7 project. Remaining tasks of the PLC-7 project, in case they occur, will be taken over by PLC-8.

PLC-8 project has work strands very similar to PLC-7 ones. But it also organizationally differs from PLC-7. The project will include two NIC assessments in 2022 and 2024 based on the periodic data reported in by 2020 and 2022 respectively. Assessment of the sources of nutrient inputs based on periodic data reporting will be performed once based on the data 2021 and with product delivery in the end of 2023. Such time distribution to tasks better caters for the countries needs in assessment data, aligns the product delivery with other HELCOM activities and increases project efficiency splitting the most time-consuming assessment work in time.

At HELCOM 41-2020 some countries informed that they were considering taking leadership of particular work strands and thematic reports and will further inform about their position by HOD 58-2020.

The document contains PLC-8 project description approved by HELCOM 41-2020.

### Action requested

The Meeting is invited to take note of the approved PLC-8 project report and invite Contracting Parties to initiate national activities to provide required data in time for timely delivery of the project products.

Contracting Parties are also invited to inform about leadership of project work strands, in case of decisions have been taken.

The Meeting invited to nominate project manager and discuss details of the project deliverables which should be taken into account in the course of its implementation.

Contracting Parties are invited to inform about any obstacles which might be encountered in the course of the project implementation and influence timely delivery of the project products.

## HELCOM Project for the Eighth Baltic Sea Pollution Load Compilation (PLC-8)

### PROJECT DESCRIPTION (PROJECT NO. )

#### 1. Title of Project

The Eighth Baltic Sea Pollution Load Compilation (PLC-8)

#### 2. Project Manager(s)

#### 3. Proposing Party

Contracting Party	_____
Commission	_____
Subsidiary body	<u>  X  </u>
Heads of Delegation	_____
Executive Secretary	_____

#### 4. The body supervising the project

Working Group on Reduction of Pressures from the Baltic Sea Catchment Area

#### 5. Objective and background

In Article 3 and Article 16 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992 (Helsinki Convention), the Contracting Parties agreed to undertake measures to prevent and eliminate pollution of the marine environment of the Baltic and to provide pollution load data, as far as available. Compilations of pollution load data (PLC) have been an integral part of HELCOM assessment system since 1987, focusing on annual and periodic assessments of inputs of nutrients and selected hazardous substances.

The HELCOM Monitoring and Assessment Strategy and inclusion of the nutrient reduction scheme in the Baltic Sea Action Plan have created demands for the major PLC products: a pressure indicator report on progress towards fulfilment of Maximum Allowable Inputs of nutrients (MAI) and an assessment of progress towards national nutrient input ceilings (NIC).

In addition to the above-mentioned products, PLC project, compiles unique data on sources and pathways of nutrients to the Baltic Sea. This information creates background for identification of measures to mitigate environmental pressure caused by nutrient load on the marine ecosystem and prioritization of sectors where these measures are to be applied. The data compiled by the project also serve for evaluation of environmental effects of applied measures bridging programmes of measures developed under various policies and their contribution to achieving ambitious environmental targets set by the HELCOM Baltic Sea Action Plan.

Since various policies contribute to the implementation of the HELCOM Baltic Sea Action Plan and achieving its environments targets, the PLC products also could be used for evaluation of progress under these policies. Among these policies the following global treaties, international and national legal acts are to be specifically emphasized: Convention on Long-Range Transboundary Air Pollution, IMO regulations on ship emissions, the EU WFD, MSFD, IED and Nitrate Directive as well as legal acts of Russia (Water Code, Law on Environment protection, etc). To cater these needs specific products, such as assessment of nutrient inputs by major rivers, input of hazardous substances and separate analysis of water and airborne input including data on contribution of Baltic and North Sea ship traffic will be produced.

The Project will use monitoring and modelling data obtained in accordance with the requirements of the HELCOM Recommendations on waterborne pollution input assessment (Recommendation 37-38-1, 2016) and on monitoring of airborne pollution input (Recommendation 37-38/2, 2016). Also, the Project will utilize data reported by the Contracting Parties under the Convention on Long-range Transboundary Air Pollution and its protocols as well as data obtained in the frame of the EU and national monitoring programmes. The assessment will be performed using the unified methodologies provided for in the updated HELCOM PLC Guideline.

The PLC-8 project will be based on annual water- and airborne data on nitrogen, phosphorus and heavy metals from 1995-2022, periodical data from 1995, 2000, 2006, 2014, 2017 and 2021. Further background information and data related to effects, and as far as possible effectiveness of measures to reduce nitrogen and phosphorus inputs will be collected and included in the assessment. The assessment will use the new PLC database (produced by HELCOM PLUS project) for reporting and quality assuring data. The tools developed by the HELCOM MAI-CART OPER project will be used to complete the assessment data set, make normalizations, trend and other statistical analysis and the evaluation of fulfilment of MAI and NIC. Standard tables and figures for the updated Core Pressure Indicator on nutrient inputs, the updated scientific report on CART follow-up assessment and for Eight Baltic Sea Pollution Load Compilation (PLC-8) will also be produced using the tools developed by HELCOM MAI-CART OPER project. The project will also produce annual the Baltic Sea Environmental Fact Sheets (BSEFs) on actual waterborne nutrient inputs. In case the data on air- and waterborne inputs of hazardous substances other than enlisted in the related HELCOM Recommendations will be available, this information will also be integrated in the PLC-8 product on selected hazardous substances as test cases.

## **6. Tasks and expected results (summary, see Annex 1 for full description)**

In order to reach project objectives, the following tasks, grouped in four working packages will be implemented:

1. DATA REPORTING AND ESTABLISHING DATASETS
  - Monitoring and reporting of national annual/periodical data
  - Annual updating PLC-Water database and data on atmospheric inputs (PLC-Air)
  - Establishing the periodic assessment data sets
  - Update of background information including information on measures
2. ASSESSMENTS BASED ON ANNUAL DATA
  - Annual BSEF on actual waterborne nutrient inputs
  - Update of HELCOM indicator on inputs of nutrients to the BS sub-basins.
  - Assessment of the progress towards national nutrient input ceilings (NIC).
  - Assessment of nutrient inputs of big rivers.
  - Assessment of inputs of selected hazardous substances.
3. ASSESSMENTS BASED ON PERIODIC DATA
  - Assessment of sources of nutrients
  - Assessment of the effectiveness of measures
4. METHODOLOGICAL SUPPORT
  - Updating guidelines and a statistical methodology report
  - Intercalibration on heavy metals and nutrients analysis

The expected results are:

1. The PLC assessment data set based on annual and periodic reports of water- and airborne inputs of nutrients and selected hazardous substances from 1995 to 2022 (periodic for 2021).
2. Four annually updated HELCOM Core Pressure Indicator on nutrient inputs (update of MAI fulfilment follow-up) (1995-2019, 1995-2020, 1995-2021 and 1995-2022)
3. Two reports evaluation progress towards fulfilling NICs based on 2020 (data 1995-2020) and 2022 (1995-2022)
4. Four annual BSEF on waterborne nutrient inputs (1995-2019, 1995-2020, 1995-2021 and 1995-2022)
5. Updated report on methodologies used to follow up the HELCOM nutrient input reduction scheme.
6. Updated PLC background report.
7. A thematic report on sources of nutrients.
8. A thematic report on effectiveness of measures to reduce nutrients inputs to the Baltic Sea.
9. A thematic report on input of hazardous substances.
10. A thematic report on nutrient inputs by the major rivers.
11. Executive summary of Eighth Baltic Sea Pollution Load Compilation (PLC-8).
12. A report on intercalibration on heavy metals and nutrients between at least 1-2 laboratories from each Contracting Party conducting chemical analysis.
13. Updated PLC guidelines on nutrients and selected heavy metals, including updated statistical methodologies used for the assessments and updated statistical methodology report.

**7. Consistency with HELCOM priorities \_\_\_\_ yes**

- In Article 3 and Article 16 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992 (Helsinki Convention);
- Baltic Sea Action Plan, HELCOM Ministerial Meeting, Krakow, Poland, 15 November 2007;
- Nutrient reduction targets, HELCOM Ministerial Meeting, Copenhagen, Denmark, 3 October 2013;
- The HELCOM Monitoring and Assessment Strategy, HELCOM Ministerial Meeting, Copenhagen, Denmark, 3 October 2013.
- National commitments based on Maximum Allowable Inputs. HELCOM Ministerial Meeting, Brussels, Belgium, 6 March 2018.
- To identify the scale of problems of contaminants of emerging concern, including micro-pollutants in coastal and marine waters. HELCOM Ministerial Meeting, Brussels, Belgium, 6 March 2018.

**8. Timetable** (see also **Annex 2**)

Task	Timeframe (quarter/year)	
	Start	End
Project management (including about 12 project team meetings)	3/2020	4/2024
Workshops (2 workshops are planned)	4/2021	3/2024
Compilation of the executive summary and policy messages	3/2024	4/2024
Monitoring, compilation and reporting of quality assured national annual/periodic data:	3/2020	4/2023
-Monitoring and compilation of national periodic data	1/2021	4/2021
-Reporting of quality assured national periodic data	4/2022	1/2023
Establishing the periodic assessment data set	2/2023	3/2023
Updated of background information including information on measures	1/2023	2/2024
Annual BSEP on waterborne nutrient inputs	2/2021	2/2024
Update of HELCOM indicator on inputs of nutrients to the BS sub-basins.	4/2020	4/2024
Assessment of the progress towards national nutrient input ceilings (NIC).	2/2022	4/2022
	2/2024	4/2024
Assessment of inputs by big rivers	1/2023	4/2023
Assessment of inputs of selected hazardous substances	1/2023	4/2023
Assessment of sources of nutrients	3/2023	2/2024
Assessment of the effectiveness of measures	1/2023	1/2024
Updating guidelines and	3/2020	1/2021
statistical methodology report.	3/2023	4/2023
Intercalibration of hazardous substances and nutrients measurement	3/2020	1/2021

**9. Budget (taking into account financial year from 1 July to 30 June)***9.1 Total Costs*

300,000 Euro

*9.2 Costs divided per financial year*

[2020/21 – 50,000 Euro

2021/22 – 50,000 Euro

2022/23 – 70,000 Euro

2023/24 – 70,000 Euro

2024 – 60,000 Euro]

### 9.3 Sources of financing divided per financial year

HELCOM budget

## 10. Additional requests (manpower, equipment, facilities, etc.)

### 10.1 From the Contracting Parties

The available funds from the HELCOM budget (indicated above and in **Annex 3**) do not cover all expenses for the implementation of the tasks. Additional funds are requested to be allocated by the Contracting Parties either via national arrangement (e.g. in kind co-financing) or contribution to the HELCOM budget, in accordance with monthly rate of the national experts and the working time required for the implementation of the individual tasks except for the tasks under the contracts between HELCOM and the PLC Data Manger (periodic data), HELCOM and EMEP Centres, work for intercalibration and expenses for proofreading and publication (see **Annex 3** for details).

The Contracting Parties are invited to take a lead in preparation of the individual thematic assessment reports (see points 2.4, 2.5, 3.1, 3.2 in **Annex 1**). The leads, through assigned experts, will be responsible for preparing the assessment reports based on the gathered data and information, in accordance with the description of the tasks and PLC Guidelines.

The PLC-8 project budget does not reflect national resources that need to be allocated for implementation of national monitoring programmes, compilation, quality assuring and reporting of national data.

The Contracting Parties are expected to attend 2-3 meetings of the PLC-8 project implementation group per year during 2020-2024 as well as two workshops. The Contracting Parties will be invited to host the meetings.

### 10.2 From the Secretariat (not financed from the PLC-8 project budget)

The Project will be supported by the Secretariat.

Annual PLC-Water data management will be covered by the Secretariat.

Annual PLC-Air data on inputs of nitrogen and selected hazardous substances will also be covered by a separate annual contract.

Contract with BNI for hosting PLC-water database and its supplementary functionality.

## 11. Organization of the project and procedure of nomination of the Project Team members

The project will be coordinated by a Project Manager. Project Manager will be nominated by the Working Group on Reduction of Pressures from the Baltic Sea Catchment Area. The PLC-8 Project Manager coordinates the work and follows the implementation of the project tasks. He is involved in the collecting of information, outlining of the project products and contributing to their content. The Project Manager with assistance of the HELCOM Secretariat reports to PRESSURE and RedCore DG, prepares project meetings and organizes workshops on technical and methodological solutions on the follow-up of the HELCOM nutrient input reduction scheme.

The HELCOM PLC-8 project will be implemented by an implementation group consisting of participants from all Contracting Parties (PLC-8 IG). Members of the PLC-8 IG, to be nominated by the Contracting Parties, will guide and support the work of the project, attend project meetings and workshops, and actively contribute into, *inter alia*, the collection of background information, revising guidelines and writing of the assessment reports. The Contracting Parties are responsible for collection, compilation, quality assurance and national

data reporting. The PLC-8 IG will meet regularly 2-3 times per year (2-3 days/meeting) during 2020-2024. The Contracting Parties will be invited to host project meetings.

It is foreseen that country-leadership will be assumed for preparation of the individual thematic assessment reports. Work on the Executive Summary will be done by a drafting team to be established at a later stage.

RedCore DG will provide methodological support for the project implementation. The group will assist with quality assurance and preparing for approval of PLC assessment dataset, scientific advice, and quality assurance of the assessment reports. HELCOM Secretariat will assist with the finalization of the reports (design, linguistic check, etc.).

Pressure Working Group supervises the implementation of PLC-8 project providing overall guidance to the project including preparation of the assessment reports. The progress in implementation of the PLC-8 will be regularly reported to Pressure group to ensure that the final products correspond to the demands of the countries and HELCOM agreements.

#### **12. Signature of the Project Manager(s)**

#### **13. Opinion of the Chairs of the relevant body**

The Chair of the Pressure working group supports the project proposal.

#### **14. Opinion of the Executive Secretary**

The Executive Secretary supports the Project proposal.

#### **15. Decision of the Heads of Delegation**

[HELCOM 41-2020 decided]

to establish  not to establish the project.

*[Outcome of HELCOM 41-2020, Paragraphs ... - ... and Annex ..]*

**Work packages and tasks including division of responsibilities**

The PLC-8 assessment results will be reported as individual thematic reports, with an Executive Summary summing up the main finding from these reports and key policy messages. The PLC-8 project will consist of the four thematic work packages (WP) and WPO - project management. The work packages will include:

**WPO**      *Project management*

The management of the project includes the overall coordination of project implementation, communication with project partners and participants with an assistance by the Secretariat, planning project activities and follow-up their implementation and reporting on status and progress of the project to PRESSURE and RedCore DG. The work package includes organization of project team meetings with assistance of the Secretariat and other project partners, as well as will support the preparation of two workshops on technical and methodological solutions to follow up the HELCOM nutrient input reduction scheme.

Main outcomes of the PLC-8 project will be summarized in an executive summary, reflecting on essential and policy-relevant aspects of the progress in implementation of the HELCOM nutrient reduction scheme and the themes of thematic reports. The work on outlining the content of the report will start along with the work on other work packages. The executive summary will be an accomplishment of the project.

The appointed Project Manager will follow the [HELCOM risk management procedure](#).

**WP1**      *Data reporting and establishing datasets*

**1.1** Contracting Parties will organize monitoring (2019-2022) and compilation of national annual and periodical data in 2021 according to the relevant HELCOM Recommendations and PLC-Guidelines. Contracting Parties will report national annual and periodic data using PLC reporting WEB application assuring quality control of the reported data and their insertion into the PLC database. The annual data will be reported by 31 October of the year following the year of monitoring and periodic by 31 March 2023. The reporting procedures will be identified by an updated version of the HELCOM document on procedures for releasing the reported PLC water data. Contracting Parties will also provide background information including data on effects of measures.

**1.2** Reporting templates (with prefilled metadata) for each reporting round of PLC-8 project will be prepared and updates of the PLC database will be made. Other activities include: carrying out manual data quality assurance; follow-up with Contracting Parties on reporting and missing data; preparing datasets for RedCore DG and PLC-8 IG to complete datasets taking into account missing data and data inconsistency. HELCOM procedure for releasing the reported PLC water data will be followed. Selected standard figures will be provided to PLC-8 IG upon request. Further, calculations of emissions of nitrogen and of actual and normalized deposition (divided per country by sub-basin including shipping in the Baltic and North Sea, inputs from the EU countries and other significant contributors of nitrogen deposition on the Baltic Sea) will be made as source receptor matrix (2021). Annual data on emission and deposition of nitrogen divided per sub-basin will be reported by MSC-W EMEP (2019-2022). Annual deposition of selected hazardous substances calculated by EMEP (MSC-E) will be included in the PLC-8 assessment.

**1.3** Establishing the periodic assessment data set as filling in data gaps, removing inconsistent data and approval of the assessment data set by Contracting Parties is included in the work package. Annual data will also be quality checked through normalization and analysis of trends in order to identify outliers, fill in data gaps as well as visually verify data on nutrient loads by rivers.

**1.4.** Background information report is a supplementary project product with the aim to provide information on major geographical parameters of the watershed of the Baltic Sea as well as on human activities related

to inputs of nutrients. Collection of background information including information on measures and compilation of the report will be carried out in the period from 2023 to 2024 utilizing the most recent available data. The report is expected to be published in 2024. The compiled information will also include information on implemented measures to reduce input of nutrients which will be utilized in the evaluation of their effectiveness.

#### *WP2 Assessments based on annual data*

**2.1.** Assessment will start from normalization, trend analysis and other statistical analysis to evaluate fulfilling MAI and NICs applying the MAI CART OPER tools. It will include annual update of MAI report (Core Pressure indicator on nutrients). The normalization and statistical data processing might be repeated in case the datasets are updated/corrected during the assessment process.

**2.2.** Assessment of progress towards NICs will be performed in 2022 and 2024. The assessment will be based on the analysis of trends based on the complete dataset applying tools for semi-automated data normalization and statistical analysis.

**2.3.** Annually produce a BSEF on waterborne nutrient inputs to the seven sub-basins of the Baltic Sea.

**2.4.** Assessment of nutrient inputs of big rivers will be performed utilizing annual dataset for the period 1995-2021. The assessment based on the same normalizing and statistical procedures as the update of MAI indicator will include at least 7 big rivers. The thematic report will be delivered in 2023.

**2.5** A thematic report on input of hazardous substances will be based on the periodic reports by countries on inputs of selected hazardous substances according to the PLC Guideline, and airborne inputs on four hazardous substances calculated by EMEP. The assessment will also as far as possible utilize other data obtained by national monitoring and screening campaigns. The thematic report will be delivered in 2023.

#### *WP3 Assessments based on periodic data*

The assessment based on periodic data is focused on two main themes: source apportionment and effectiveness of measures.

**3.1** A thematic report on sources of nutrients (source apportionment) will be based on the periodic reports by countries on industrial, WWTP and aquaculture point sources, and on natural background and diffuse sources in accordance with the PLC Guideline. The assessment will include quantification of inputs from various sources to the sea (load-oriented approach) and to inland surface waters (source-oriented approach). The thematic report will be delivered in 2024 based on data from 2021 and compared with results from former periodic assessments in 2006, 2014 and 2017.

**3.2** A thematic report on effects of measures to reduce nutrients inputs to the Baltic Sea will be based on information from open sources provided by the countries and possibly a targeted questionnaire prepared by the project. The report will also utilize outcomes of the workshop(s) and other reporting by countries (e.g. programmes of measures, etc.) and address effectiveness of measures as far as possible. The thematic report will be delivered in 2024.

#### *WP4 Methodological support*

**4.1** In order to improve quality and intercomparability of PLC products, regular intercalibration between laboratories conducting chemical analysis are necessary. The latest intercalibration was conducted in 2017 on nutrients (nitrogen and phosphorus including fractions of these) and selected heavy metals. Results from 20 laboratories in fresh water and 27 laboratories in wastewater were compared. The PLC-8 project will perform intercalibration with at least one laboratory from each Contracting Party participating, but altogether up to twenty laboratories are budgeted. The intercalibration will be made for selected hazardous substances, total nutrients (nitrogen and phosphorus) and nutrient fractions (total nitrogen, ammonia-N,

nitrite-nitrate-N, dissolved and total and phosphorus) from both river and point source (waste water) samples.

**4.2** HELCOM PLC Guideline was adopted for publication by HELCOM 40-2019. The Guideline contains description of assessment methodologies as well as data reporting format. The HELCOM PLC Guideline (2019) needs to be updated utilizing the experienced gained by the PLC-7 project. The following methodologies will be adjusted/updated by the PLC-8 project:

- statistical methods;
- evaluation of effects of measures;
- calculation of transboundary input;
- adjusting of evaluation of progress towards national input ceilings;
- identification of natural background and retention
- source apportionment methodology including methodology for estimating inputs from unmonitored areas/diffuse inputs.

**Division of responsibilities**

Work package	Task	Specification	Responsible	Deliverables
WP0: Project management	0.1 Overall coordination, communication, implementation and follow-up	<ul style="list-style-type: none"> <li>- regular reporting of the progress to Pressure WG</li> <li>- planning project activities</li> <li>- follow-up of their implementation.</li> </ul>	Project Manager	<p>Progress reports to Pressure group meetings.</p> <p>Outcomes of the project meetings.</p> <p>Outcomes of workshops</p>
	0.2 Preparations for meetings and workshops	<p>Technical and methodological aspects of project implementation.</p> <p>With assistance from the Secretariat</p>	Project Manager	<p>2 workshops will be organized</p> <p>2-3 project meetings per year during 2020-2024</p>
	0.3 Compilation of the executive summary with policy messages	Main outcomes of the PLC-8 assessment will be synthesized in the executive summary covering policy messages on the progress in implementation of the HELCOM nutrient reduction scheme and the themes of thematic reports.	<p>A drafting team;</p> <p>RedCore DG methodological support</p>	Executive summary with policy messages
WP1: Data reporting and establishing datasets	1.1 Monitoring, compilation, quality assurance and reporting of national annual and periodical data	According to the PLC Guideline and the timelines of HELCOM procedure for releasing the reported PLC water data.	Contracting Parties	
	1.2 Updating PLC-Water database and data on atmospheric inputs	<p>The tasks for the PLC Water Data Manager related to the PLC-8 assessment</p> <p>The tasks for the WSC-W EMEP centre as related to the PLC-8 assessment</p>	<p>PLC-Water Data Manager</p> <p>WSC-W EMEP</p>	<p>The PLC water database is annually updated with verified national annual data.</p> <p>Data on nitrogen emission and deposition is annually reported by EMEP and related fact sheets approved by countries and published.</p> <p>The PLC water database updated with the verified periodical data 2021 reported by countries.</p> <p>Source receptor matrixes (2021) and</p>

				country pr. basin deposition for all HELCOM CP's, other EU countries and other major sources on nitrogen deposition based on normalized data 1995-2021.  Data for assessment of loads by big rivers (including trend and changes) and for inputs of hazardous substances to the Baltic Sea
	1.3 Establishing the periodic assessment dataset	Verification of the periodic PLC data 1995-2021 for outliers and suspicious data, filling-in data gaps, establishing waterborne input country pr. sub-basin taking into account transboundary inputs and retention. Getting approval from national experts in Contacting Parties  low-normalisation of waterborne inputs, checking for trends in riverine, direct, waterborne, airborne and total inputs country pr. basin. Tables and figures, updating text.  Preparing data for the assessment of source apportionment (periodical data),	BNI, DCE  RedCore DG and Project Manager	The periodic assessment dataset established and approved by the national experts.
	1.4 Update of background information including information on measures	Collection of background information including information on measures and compilation of the report will be carried out in the period from 2023 to 2024 utilized the most recent available data.	Project manager and the Secretariat together with PLC-8 IG	Updated background information report is published.
WP2: Assessments based on annual data	2.1. Update of HELCOM indicator on inputs of nutrients to the BS sub-basins.	Normalization, trend analysis and other statistical analysis to evaluate fulfilling MAI. Producing graphs and tables. Update of the indicator report and key message.	BNI and DCE lead preparing of annual reports together with PLC-8 IG	Annually updated HELCOM Core Pressure Indicator on nutrient inputs.
	2.2. Assessment of the progress towards national nutrient input ceilings (NIC).	Estimation of total inputs country pr. basin including, uncertainty, evaluation of NIC fulfilment, produce tables and figures. Writing text of the assessment report including key message.	BNI and DCE lead preparing of the report together with PLC-8 IG	Thematic report on progress towards national input ceilings (NICs) in the period 1995-2020. [the report could be updated utilizing annual data 2022]

	2.3 BSEFs on waterborne nutrient inputs	Annual updating BSEF on waterborne nutrient inputs to the Baltic Sea and its seven sub-basin (figures, tables, statistical analysis, update text)	DCE and BNI prepare updates. RedCore DG quality assures	Annual updates of BSEF on waterborne nutrient inputs
	2.4. Assessment of nutrient inputs of big rivers.	Assessing nutrient loads on the sea by at least seven big rivers, evaluating significance of inputs to the Baltic Sea, and trend and changes in loads	[Finland] leads the preparation of the assessment report together with PLC-8 IG.  BNI provides data series and DCE makes statistical analysis.  RedCore DG methodological support	Thematic report on nutrient load by at least seven big rivers.
	2.5. Assessment of inputs of selected hazardous substances	Evaluate comparability of the data on hazardous substances concentrations between countries and years. Estimate inputs of HZS to the Baltic Sea, produce figures and tables, preparing text for PLC-8 assessment.	[Sweden] leads preparing of the report together with PLC-8 IG;  RedCore DG methodological support	Thematic report on input of selected hazardous substances into the Baltic Sea
WP3: Periodic assessment	3.1 Assessment of sources of nutrients	Elaboration of source apportionment (load and source-oriented approach), assessing main sources, produce figures and tables, preparing text for PLC-8 assessment.	[Denmark] leads preparing the report together with the PLC-8 IG;	Thematic report on source apportionment as a part of PLC-7 assessment report.

	3.2 Assessment of the effectiveness of measures	<p>Compilation of data on measures to reduce input of nutrients implemented in the assessment period from all countries and reduction achieved through these measures.</p> <p>Compilation of information on measures foreseen by the countries to reach the reduction targets by 2021 and anticipated reduction through each of them.</p> <p>Assessment of the effectiveness of measures throughout the BS region,</p>	<p>[Finland] leads preparing the report together with the PLC-8 IG;</p> <p>RedCore DG methodological support</p>	Thematic report on effectiveness of measures to reduce nutrients inputs to the Baltic Sea
WP4: Methodological support	4.1 Intercalibration on heavy metals and nutrients	<p>Intercalibration with at least one laboratory from each Contracting Party. The intercalibration will be made for selected hazardous substances from river and point source samples.</p> <p>Intercalibration for total nutrients and nutrient fractions (total nitrogen, ammonia-N, nitrite-nitrate-N, dissolved and total and phosphorus) will be carried out for at least one laboratory from each Contracting Party.</p>	Project Manager, PLC-8 IG	The intercalibration report covering at least 1 and up to 2 laboratories per Contracting Party
	4.2 Updated PLC guidelines and statistic report	<p>The following methodologies will be adjusted/updated by the PLC-8 project:</p> <ul style="list-style-type: none"> <li>• statistical methods;</li> <li>• evaluation of effects of measures;</li> <li>• calculation of transboundary input;</li> <li>• adjusting of evaluation of progress towards national input ceilings;</li> <li>• identification of natural background and retention in inland surface waters</li> <li>• source apportionment methodology and methodology for estimating inputs from unmonitored areas</li> </ul>	<p>[Denmark] leads updating the PLC guideline and statistic report together with PLC-8 IG.</p> <p>Methodological support by RedCore DG</p>	Updated HELCOM PLC Guideline, including an updated report with statistical methods for the assessments

**Project timetable**

**Annex 3**

WP	Task	3-2020	4-2020	1-2021	2-2021	3-2021	4-2021	1-2022	2-2022	3-2022	4-2022	1-2023	2-2023	3-2023	4-2023	1-2024	2-2024	3-2024	4-2024
WP0	Project management																		
	Workshops																		
	Executive summary																		
WP1	Monitoring and reporting of national annual/periodical data																		
	Updating PLC database and data on atmospheric inputs																		
	Establishing the periodic assessment data sets																		
	Update of background information																		
WP2	Annual BSEF on actual waterborne nutrient inputs																		
	Update of HELCOM indicator on inputs of nutrients																		
	Assessment of the progress towards input ceilings (NIC).																		
	Assessment of nutrient inputs of big rivers.																		
	Assessment of inputs of selected hazardous substances																		
WP3	Assessment of sources of nutrients																		
	Assessment of the effectiveness of measures																		
WP4	Updating guidelines and statistical methodology report																		
	Intercalibration on hazardous and nutrients																		

## The HELCOM budget for PLC-8 Project

Annex 4

	Project tasks	Project management	Statistical analysis (DCE)	inter-calibration*	Assessment data processing (BNI)	Periodic PLC water data management (SYKE)	Periodic data on air-borne input (EMEP)	Assessment tasks by experts	Report proofreading & publishing	Total for the tasks
WPO	Project management, including annual BSEFS (2.3) and update of MAI core indicator (2.1)	46100							3000	49100
	Workshops									0
	Executive summary							7000		7000
WP1	Monitoring and reporting of national annual/periodical data									0
	Updating PLC database and data on atmospheric inputs					28500	27000			55500
	Establishing of the periodic assessment data set (BNI)				33000					33000
	Update of background information									0
WP2	Assessment of the progress towards input ceilings (NIC).							25500		25500
	Assessment of nutrient inputs of big rivers.							14000		14000
	Assessment of inputs of selected hazardous substances							16750		16750
WP3	Assessment of sources of nutrients							20650		20650
	Assessment of the effectiveness of measures							17650		17650
WP4	Updating guidelines and statistical methodology report		20500					15350		35850
	Intercalibration on heavy metals and nutrients			25000						25000
<b>HELCOM budget</b>		<b>46100</b>	<b>20500</b>	<b>25000</b>	<b>33000</b>	<b>28500</b>	<b>27000</b>	<b>116900</b>	<b>3000</b>	<b>300000</b>

\* price for 15 laboratories participating in the intercalibration. (27,000 € for 20