OUTCOME OF THE SEVENTH MEETING OF SIXTH BALTIC SEA POLLUTION LOAD COMPILATION PROJECT (HELCOM PLC-6)

Introduction

0.1 In accordance with the decisions of the 6th meeting of the HELCOM project Sixth Baltic Sea Pollution Load Compilation (paragraph 5.5, Outcome of PLC-6 6-2014) and the eighth meeting of the HELCOM Expert Group on follow-up of national progress towards reaching BSAP nutrient reduction targets (paragraph 5.15, Outcome of LOAD 8-2014), the 7th meeting of the Sixth Baltic Sea Pollution Load Compilation (PLC-6) project group (PLC-6 7-2014) was held on 15-17 December 2014 at the premises of HELCOM Secretariat in Helsinki, Finland.

0.2 The Meeting was attended by representatives from Denmark, Finland, Germany, Russia Sweden, Invited Guest Baltic Nest Institute (BNI) - Sweden and the Data Consultants SYKE and EMEP. The List of Participants is contained in **Annex 1**.

0.3 The Meeting focused on finalizing the PLC-6 guidelines and the PLC annual and periodic reporting templates; drafting an outline for the PLC-6 assessment; and discussed issues related to the follow-up of progress towards fulfilling the maximum allowable inputs (MAI) and country-wise allocated nutrient reduction targets (CART) of the HELCOM the nutrient reduction scheme, including a step-by-step example on CART follow-up.

0.4 Mr. Lars M. Svendsen, PLC-6 Project Manager, chaired by the workshop and Ms. Minna Pyhälä, HELCOM Secretariat, acted as Secretary.

Agenda Item 1 Adoption of the Agenda

Documents: 1-1

1.1 The Meeting adopted the agenda as contained in document 1-1.

Agenda Item 2 Information from the Project Manager, Secretariat and Contracting Parties

Documents: 2-1, 2-2

2.1 The Meeting took note of the progress in implementation of the PLC-6 project as summarized by the Project Manager, Mr. Lars M. Svendsen (document 2-1, presentation 1).

2.2 The Meeting took note of the outcome of the 47th meeting of the HELCOM Heads of Delegation as contained in document 2-2.

2.3 The Meeting discussed possible cooperation with transboundary river basin commissions and pointed out that Contracting Parties should clarify what additional data might be obtained from the river basin commission, which are currently not reported to the HELCOM PLC database.

2.4 The Meeting noted that many of these commissions do not work on pollution input issues, but rather on water quality and flood related concerns. The Meeting felt that the commissions might be able to deliver more HELCOM relevant data if they are more informed of the HELCOM PLC activities and the nutrient reduction scheme.

2.5 The Meeting agreed that relevant river basin commissions should be invited to participate in the workshop on updating knowledge on retention coefficients and transboundary input in May 2015 (cf. Agenda Item 7). The Meeting identified relevant commissions in **Annex 2** and

invited Contracting Parties to inform the Secretariat (minna.pyhala@helcom.fi) of relevant contacts in the commissions **by 26 January 2015**.

2.6 The Meeting took note of the following information related to PLC monitoring and assessment by the Contracting Parties:

- Denmark informed that phosphorus inputs from unmonitored areas in Bornholm will change for all years
- Germany is exploring their possibility to report periodic data for 2014, even though they originally carried out the monitoring for 2012. Modeling of inputs in Germany has changed since the MONERIS model has been upgraded and extended. The new model is called Modeling of Regionalized Emissions (MORE). Data from 1983-2011 is already available and data up to 2015 will be available in early 2017. Germany offered to present the new model at a future PLC-6 meeting and Dietmar Koch will be in touch with Ms. Antje Ulrich, Germany, to crosscheck the sizes of catchment areas and monitoring stations used in MORE and the PLC database
- Russia informed that there is an intention to submit more complete data for 2013-2014 within the PLC reporting (loads from unmonitored areas and Kaliningrad). In case more complete data is presented by Russia, there will be some inconsistencies in the long-term time series of inputs and therefore a need on discuss how this might be dealt with for the MAI-CART follow-up assessments
- No new information was provided by Finland or Sweden.

Agenda Item 3 Status of PLC data

Documents: None

3.1 The Meting noted that Germany, Lithuania, and Poland have submitted 2013 PLC data. German and Polish data has been reported using the new templates, and Lithuanian data were reported before the elaboration of the new reporting templates. Germany will re-upload their data using the final template.

3.2 The Meeting recalled that the old PLC database has been closed and that 2013 data need to be in the new template in order to enter them into the new PLC database (cf. paragraph 4.8).

3.3 The Meeting noted that some inconsistencies (which came to light during the transfer of the PLC data from the old MS Access database to the new SQL database) in Latvian and Polish historical PLC data are still being clarified by the Data Manager and the Contracting Parties. The Meeting welcomed the information that the data migration is mostly complete and is expected to be finalized in early 2015.

Agenda Item 4 Finalization of PLC-6 Guidelines

Documents: 4-1, 4-2, 4-3, 4-4, 4-4-Rev.1

4.1 The Meeting considered the latest version of the PLC-6 guidelines (document 4-4), clarified a couple of open issues in chapters 1-8, and reviewed and updated chapters 9-15 as contained in document 4-4-Rev1.

4.2 The Meeting considered the examples of PLC point source data corresponding to EU data collection as compiled by Germany (document 4-3) and noted the discrepancies between the input data from point sources in the PLC compared to EU PRTR. The Meeting acknowledged that some differences are due to the fact that not all point sources are reported to PRTR but agreed that the discrepant data should be verified and corrected by the competent authority that national PLC-6 project members should act as mediators.

4.3 The Meeting discussed how to deal with the reporting of industrial inputs for PLC and agreed that the column EU/ NATIONAL_CODE in the PLC reporting template should be used for codes which correspond either to the UWWTP Directive or to E-PRTR (for EU member states when available) in order to facilitate reporting by Contracting Parties as well as quality checking.

4.4 The Meeting mandated Germany and the Project Manager to revise the sections that relate to INDUSTRY in the draft PLC-6 guidelines, accordingly and agreed that an example on how to report industrial point sources should also be presented in Annex 6.

Finalization of the template for annual PLC reporting

4.5 The Meeting considered and discussed the latest version of draft annual reporting template as contained in document 4-1. The Meeting agreed on the templates in general but pointed out that for transboundary inputs, the downstream country should report the total input at the river mouth as well as the monitored (or estimated) input at the border.

4.6 The Meeting requested the Data Consultant SYKE to correct and finalize the template accordingly.

4.7 The Meeting considered the draft Annex 2 with the instructions for filling in the annual reporting template as contained in document 4-2. The Meeting felt that it is comprehensive and an excellent draft but that it still needs some fine tuning (especially related to wording describing whether specific reporting requirements are mandatory or voluntary). The Meeting invited Contracting Parties to provide their possible comments to the Data Manager (pekka.kotilainen@ymparisto.fi) **by 16 January 2015**.

4.8 The Meeting recalled and reaffirmed the following schedule for carrying out the reporting of 2013 PLC data as propose by PLUS 7-2014:

- the Data Manager should updated the pre-filled in country-wise templates **by 16 January 2015** and submit them to the countries.
- the Web Application Developer BNI, Sweden, should update the data uploading functionality according to the final annual reporting template so that it can be used for testing in the end of January
- the new annual reporting template and upload functionality should be tested by Contracting Parties and reviewed by the next meeting of the PLUS project (PLUS 8-2015) on 10-11 February 2015
- Contracting Parties should report their 2013 PLC data **by Monday 2 March 2015**
- A 1-2 day workshop should be arranged for data reporters before the PLC-6 reporting deadline, with the aim to go through the filling in of the reporting templates and to discuss quality assurance checks, and also consider examples of how to report transboundary rivers.

4.9 The Meeting stressed the importance of participation by all Contracting Parties (especially those who have not participated in recent PLUS and PLC-6 project meetings) at the meeting of PLUS 8-2015 in order to ensure that they are able to test the uploading of PLC data to the new database.

Finalization of the template for periodic PLC reporting

4.10 The Meeting considered the draft periodic reporting template presented by the Data Manager and provided the following feedback:

- Those data that are reported also annually (e.g. direct point sources) should be identical to the data reported via the annual reporting. Since some countries might

report more direct point sources for periodic assessments, this will affect total inputs and the trend results slightly

- The indirect point sources should be reported in separate worksheets to the direct point sources which are reported annually
- Worksheet on Indirect point source background: If number of plants = 1, then latitude & longitude should be reported. If point sources are aggregated (i.e. number of plants >1), then information on sub-catchment where the point sources are located must be provided
- The comment related to reporting of industries should be identical to the wording used in the E-PRTR register.
- In the worksheet on monitored diffuse sources, consider removal of the column "PERIOD_TYPE"
- In the Station_Flow_Concentration worksheet, the "period name" column enable also reporting of long- term flow
- In the MWWTP_Flow_Load and Industrial_Flow_Load sheets: the choices for treatment methods should be: untreated, primary, secondary, tertiary with P removal, tertiary with N and P removal, and other (The PLUS team is invited to consider whether it is possible to if CPs report "Other" they should specify what in another column. There will be a need to consider how to transfer historically reported categories to the new categorization).
- In the MWWTP_Flow_Load and Industrial_Flow_Load sheets: new parameters should be added for % removal of N and P for the direct and indirect point sources – and should be requested for all individually reported point sources (but as a minimum for >10,000 PE).

4.11 The Meeting invited the Data Manager to update the template, with the aim that the revised periodic reporting template should be circulated to Contracting Parties for review on **30 January 2015** so that it can be finalized and approved during the next PLUS project meeting on 10-11 February 2015 (PLUS 8-2015).

4.12 The Meeting requested the Data Manager to also prepare the draft Annex 3 of the guidelines with instructions for filling in the periodic reporting template, making use of the draft Annex 2, and to submit it **latest on the 30 January 2015** to PLUS 8-2015 for review latest.

Clarification of inconsistencies in areal definition

4.13 The Meeting reviewed and updated the area definitions of transboundary areas as contained in chapter 8.5 of the PLC-6 guidelines (cf. document 4-4-Rev1).

Agenda Item 5 Preliminary outline for the PLC-6 assessment

Documents: None

5.1 The Meeting took note of the guidance for the PLC assessment products presented by the HELCOM Executive Secretary Ms. Monika Stankiewicz (presentation 2). She stressed the need to ensure that HELCOM assessments (including PLC) are timely (feeding into policy needs); that policy relevant data is released as soon as possible; and that the assessment results are presented in a user-friendly and understandable format.

5.2 The Meeting agreed that it would be useful to develop a strategy for the next generation of PLC data products and was of the opinion that such a strategy should be drafted by RedCore DG and circulated to Pressure WG and HODs for commenting and endorsement.

5.3 The Meeting was of the view that it is important to identify the main target groups interested in PLC results and their main data needs. The Meeting discussed possible expected needs

and expectations of the main user groups and outlined some initial ideas (requirement analysis) as contained in **Annex 3**. The Meeting agreed that these ideas could be used as supporting information for the PLC assessment strategy document (cf. paragraph 5.2), and suggested that RedCore DG could further elaborate and summarize this information in a more user-friendly manner. The Meeting also felt that the results of the user requirements questionnaire carried out under the PLUS project contains relevant information that should be taken into account.

5.4 The Meeting recalled the expected outcomes of the PLC-6 project as outlined in the project description and made an overview of existing and needed PLC deliverables for fulfilling these requirements (**Annex 4**). In order to ensure efficient use of resources, that Meeting agreed that the PLC-6 report should avoid repeating information available via other assessments and reports but rather focus on the additional results that will be compiled through the periodic reporting (i.e. source apportionment, evaluate effect of measures, transboundary inputs, heavy metal inputs etc.).

5.5 The Meeting proposed that this overview should also be used as supporting information for the PLC Strategy documents to be presented to Pressure and HODs.

5.6 The Meeting discussed how to quantify the total inputs of the three main heavy metals and the possibilities to include an overview of the main sources of in the PLC-6 assessment. The Meeting was of the view that the reported waterborne heavy metal input data from some countries is very deficient and inconsistent and that former presented total heavy metal inputs have been very misleading. The Meeting agreed on the need to consider whether it is possible to fill in data gaps and suggested that the RedCore DG could scrutinize the heavy metal data and to consider whether a workshop should be arranged to try to fill in the gaps.

5.7 The Meeting discussed the possible format of the PLC-6 assessment and was of the view that it would be a good idea to make it as an e-book which contains links to other PLC products such as the MAI and CART follow-up assessments and more technical/scientific products. This would allow for more efficient use of resources so that the PLC-6 project would focus on making the assessment on source apportionment and links could be added to the MAI and CART follow-ups in order to give the more comprehensive picture.

5.8 The Meeting felt that it might also be beneficial to make the MAI and CART follow-up assessments as e-books as this would make them more user-friendly and easier to merge to the PLC-6 assessment.

Agenda Item 6 Improvement of pollution input data for follow-up of the HELCOM nutrient reduction scheme

Documents: 6-1, 6-2, 6-3

6.1 The Meeting took note of information on the progress with development of a follow-up system for assessing progress towards maximum allowable inputs (MAI) and country-wise allocation of reduction targets (CART) of the HELCOM nutrient reduction scheme.

6.2 The Meeting took note of the latest version of the core pressure Indicator on nutrient inputs (document 6-1) and that it was adopted by HOD 47-2014. HOD 47-2014 was of the view that the BALTSEM sub-basin division should be used in the key message (i.e. option 2) in order to be in line with the actual assessment. The maps should therefore be updated to remove the background colouring. An explanation should also be added to clarify that the assessment is carried out on inputs to the Baltic Sea as a whole although the MAI are calculated based on eutrophication targets for open sea areas.

6.3 The Meeting took note of the draft CART follow-up assessment which was submitted to HOD 47-2014 (document 6-2) and invited Contracting Parties to provide possible additional comments **by 30 January 2015**, noting that also HOD 47-2014 also requested Contracting Parties for feedback by this deadline.

6.4 The Meeting discussed the next stages of work to finalize the assessment, noting that the RedCore DG should further elaborate it and submit it to Pressure 2-2015 for commenting and endorsement before it is finalized and forwarded for adoption to HOD 48-2015.

6.5 The Meeting took note of the step-by-step procedure for carrying out national CART follow-up as presented by Mr. Bo Gustafsson, BNI Sweden (presentation 3, document 6-3).

Agenda Item 7 Future work

Documents: 7-1

7.1 The Meeting reviewed the list of project contacts (document 7-1) and updated it as contained in **Annex 5**.

7.2 The Meeting recalled that at HOD 46-2014 Sweden raised the issue of the new reporting requirement related to uncertainty on national data sets and suggested the organizing of a workshop back-to-back with a meeting dealing with LOAD issues to discuss and secure a common approach to this reporting. The Meeting proposed that this workshop should be held on 18 May 2015 and welcomed the provisional offer of SLU to host the meeting in Uppsala, Sweden.

7.3 This Meeting noted that HOD 47-2014 supported the arranging of a workshop on retention coefficients and transboundary inputs on 5 May 2015 in Estonia, back-to-back with the next meeting of the Pressure working group. The Meeting noted that the first week of May is a public holiday in Russia and that it is unlikely that Russian representatives from the transboundary river basin commissions would participate. The Meeting therefore proposed to arrange this workshop on 19 May 2015 instead and welcomed the provisional offer of SLU to host the meeting in Uppsala, Sweden.

7.4 The Meeting agreed to hold the next meeting of the PLC-6 project group on 20-21 May 2015, followed by a RedCore DG meeting on 22 May 2015 and welcomed the provisional offer of SLU to host the meeting in Uppsala, Sweden.

Agenda Item 8 Any other business

Documents: None

8.1 The Meeting took note progress with the implementation of the PLUS project for modernization of the PLC database and that the data migration from the old PLC database to the new database has been completed, the database is now hosted at BNI Sweden and SYKE has access to it remotely.

Agenda Item 9 Closing of the Meeting

Documents: Outcome

9.1 The Meeting adopted the draft Outcome of the Meeting. The Outcome, together with the documents and presentations considered by the Meeting are available in the HELCOM Meeting Portal.

Annex 1 List of Participants

Name	Representing	Name of organization	E-mail address
Chair			
Lars M. Svendsen	Denmark	Danish Center for Environment and Energy, Aarhus University	lms@dce.au.dk
Contracting Parties			
Antti Räike	Finland	SYKE	antti.raike@ymparisto.fi
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Seppo Knuuttila	Finland	SYKE	seppo.knuuttila@ymparisto.fi
Dietmar Koch	Germany	UBA, Germany	dietmar.koch@uba.de
Natalia Oblomkova	Russia	SPb PO "Ecology&business"	oblomkova@helcom.ru
Lars Sonesten	Sweden	Swedish University of Agricultural Sciences and Swedish, Environmental Emissions Data	Lars.Sonesten@slu.se
Invited Guest			
Bo Gustafsson	Other	Baltic Nest Institute	bo.gustafsson@su.se
Data Consultants			
Jerzy Bartnicki (via Skype)	Data Consultant	EMEP MSC-W	jerzy.bartnicki@met.no
Pekka Kotilainen	Data Manager	Finnish Environment Institute (SYKE) / Marine Research Centre	pekka.kotilainen@ymparisto.fi
Marco Manzi	Database Expert, PLUS project	Finnish Environment Institute (SYKE) / Information Centre	marco.manzi@ymparisto.fi
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Semeena Valiyaveetil Shamsudheen (via Skype)	Data Consultant	EMEP MSC-W	semeenav@met.no
Secretariat			
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Dmitry Frank-Kamenetsky	Secretariat	HELCOM Secretariat	Dmitry.frank-kamenetsky@helcom.fi
Monika Stankiewicz	Secretariat	HELCOM Secretariat	Monika.stankiewicz@helcom.fi

Annex 2 Transboundary river basin commissions to be contacted

The Meeting agreed that relevant river basin commissions should be invited to participate in the workshop on updating knowledge on retention coefficients and transboundary input in May 2015. The Meeting invited Contracting Parties to inform the Secretariat (minna.pyhala@helcom.fi) of relevant national contacts in the commissions (cf. paragraph 2.5) **by 26 January 2015** so that the commissions can be contacted and invited to the workshop. The table below lists the relevant commissions to be invited as well as the country who should inform the Secretariat of the relevance contact (Contact name, Organization, Email address).

Transboundary river basin commission	**Contracting Party to inform of relevant commission contact**
Narva	Natalia Oblomkova
Torne älv	Lars Sonesten
Gauja	Peeter Ennet
Lielupe	Svajunas Plunge
Oder	Dietmar Koch
Neva	Natalia Oblomkova
Pregolya	Natalia Oblomkova
Venta	Svajunas Plunge
Barta	Svajunas Plunge
Daugava	Natalia Oblomkova
Nemunas	Svajunas Plunge
Vistula	Poland
Göta älv	Lars Sonesten
Indalsälven	Lars Sonesten
Ångerman älvän	Lars Sonesten
Coastal LV/Baltic Proper	Svajunas Plunge
Coastal RU/Baltic Proper	Natalia Oblomkova
Coastal RU/Gulf of Finland	Natalia Oblomkova
Salaca	Peeter Ennet

Annex 3 User requirements of PLC data/data products/assessments

Target Group	What do they require/expect	Which kind of information is needed to fulfil their request (what can we provide)	What kind of product/assessment can we provide to fulfil these requirements									
			MAI Assesm net		CART Assesmnet		PLC periodic assessment		Assessments of waterborne and airborne hazardous substances emissions and inputs	Actual data	Modern PLC database (easly accessible data for making personal graphics)	HELCOM supporting services (web-site, Data&Map service, fact sheets ect.)
			Key messages&results	Detailed inforamation	Key messages&results	Detailed inforamation	Summary	Full report				
HODs / Ministries in CPs	Main pressures/sources What is the trend in national inputs? How far are we from reaching MAI? Has the CP fulfilled CART? Effects of measures, what is the importance of different sources? Potential effects of further measures on nutrient reduction? Cost of implementing measure	Trends Source apportionments Results of implemented measures Scenarios of changes in inputs as a result of implementation of measures	x		x		x		x			
Decision makers (politicians)	Needs for additional measures Where measures should be taken? How much would it cost? Expected results of additional measures Progress over time	Main/largest pollution sources (i.e. hot spots, phosphogypsum stacks) Source apportionment data Cost-efficiency of measures Effectiveness of measures taken Trend data	x		x		x		x			
Civil servants in the Contracting Parties	Same as HOD More detailed data: - proportion of airborne, waterborne and transboundary inputs)	Source apportionment data Cost-efficiency of measures Effectiveness of measures taken		X		X	X					

	- Inputs from different sources - Follow up of implementation, as well as effects of, Programmes of Measures - Input to EU reporting (WFD, MSFD, UWWTD, Nitrates Directive) - Information for comparing progress with other CPs	Trend data Data sets, tables, graphs										
HELCOM Groups/ projects	Inputs to assessments (e.g. HOLAS II, CORESET II, core indicators, BSEFS) Input to monitoring manual and common guidelines (statistical methods and QA issues) STATE: loads and trends, future prognosis PRESSURE: source apportionment, effectiveness of measures (main pollution sources, incl. i.e. hotspots and phosphogypsum stacks) FISH and AGRI: source apportionment data MARITIME: Shipping emissions	- Average N, P heavy metal, and dioxins (airborne) inputs during x-x period - Trends in inputs -Prognosis, scenarios -Source apportionment		x		x	x			x		
Other Conventions/ International obligations **(e.g. OSPAR, EEA, UN, Input to IMO, UNECE CLRTAP, Nordic Council of Ministers)**	1. Input of regional assessment results to pan-European and global assessment 2. Harmonized methodologies & cooperation	Main assessment results (including indicator reports and fact sheets – also ship emission indicator being updated under MARITIME Group) Information about methodologies (e.g. PLC guidelines and statistical report etc)		x		x	x					
Transboundary river basin commissions	Information about nutrient reduction scheme Source apportionment	Transboundary inputs Source apportionment				x		x				
NGO's and consultancies	Everything (details, including methodology, uncertainty information, consistency) Basic source apportionment Want to score CP commitment to implementation of agreed actions	All assessment results Information about methodologies and uncertainty Actual data		x		x	x		x			
Foundations and funding agencies	Main pollution sources, source apportionment, Effectiveness and cost of measures	Main/largest pollution sources (i.e. hot spots, phosphogypsum stacks) Source apportionment data Cost-efficiency of measures	x		x		x					

		Effectiveness of measures taken Trend data Comparison between countries										
Scientific Community	Raw data (long term time series) <u>Basic source apportionment</u> Also all details, including methodology, uncertainty information, consistency	Detailed assessment Raw data sets Any kind of information that ensures scientific acceptance of HELCOM PLC results (information about methodology, uncertainty, consistency, QA)		x		x		x	x	x	x	
Journalists and press officers	Politically hot topics, easily digestible messages, data behind assessment product (Excel files)	Main pollution sources Trends Effectiveness of measures Costs of measures Data quality Future scenarios	x		x		x			x	x	x
The "public"	Local information about inputs and sources, general information about progress, implementation of measures <u>basic source apportionments</u> Effective use of taxpayers money	Source apportionment, Main pollution sources, Trends Effectiveness of measures taken	x		x		x				x	x
Others, incl. educational institutes (schools, museums etc.)	Introduction to the problem, Main priorities Trends Data, Datasets via Map and Data service Also all details, including methodology, uncertainty information, consistency	Trends Source apportionment General data products	x		x		x					x

Annex 4 Overview of PLC data deliverables and how they fulfill PLC-6 expected outcomes

Table: Expected results of the PLC-6 project in the context of the full framework of PLC data products. *Colour coding used in the table: Existing/Accomplished; In progress; To be elaborated*

Expected result of PLC-6 project (from project description)	**Included in BSEFS / EMEP Annual report**	**Included in Core indicator (MAI follow-up) – to be updated annually**	**Included in proposed CART follow-up – to be updated every X years**	**Focus of the PLC-6 project and assessment report**
Compile information on the waterborne inputs of important pollutants (primarily nitrogen and phosphorus) entering the Baltic Sea during 1994 to 2014 and from different sources in the Baltic Sea catchment area on the basis of harmonised monitoring methods	Make an annually updated Baltic Sea Environment Fact Sheet on waterborne inputs of heavy metal (based on what was online some years ago) – Is this necessary????	Per sub-basin (for N and P) – sources are airborne, riverine and direct- - Do not include real information of sources	Per country and transboundary sources (for N and P) This product is not directly suitable per country as the focus are on national net contribution – but it provides transboundary riverine and atmospheric inputs	Inputs pr. Sub-basin to the Baltic Sea with focus on an assessment of source apportionment (MWWTP, industry, agriculture, natural background, scattered dwellings etc) within the catchment area (only for 2000, 2006, 2014) – potential develop in the importance of these source Transboundary input – look more on importance of retention. Look on uncertainty, importance for reference inputs and evaluation of targets. Further make an first overall assessment on selected HM's inputs Relevant to compared with MAI for N and P
Compile information on airborne input of N, P and selected hazardous substances to the Baltic Sea sub-basins from different	EMEP BSEFS on heavy metals and PCDD/Fs	Per sub-basin (for N and P)	Per country and transboundary sources (for N)	Blame matrix (inputs from different sources to the different sub-basins) – pr.

countries and sources by using information delivered by EMEP	EMEP report on sources	Do not include real information of sources	-only information on aggregated transboundary inputs	country. Further look at emissions of different compounds Relevant to compared with MAI for N and P
Assess long-term changes in the pollution load to the Baltic Sea by normalizing data and making trend analysis with standardized methodologies		Overall trend for total N and P inputs to the Baltic Sea as a whole	For N and P (by country/source per basin) – but on country net input	Trend for country per basin on direct, riverine, waterborne, airborne and total N and P inputs. Not realistic to make trends on waterborne HM's
Determine the priority order of different sources of pollutants for the pollution of the Baltic Sea				Only periodically as sources are not assessed annually
Overall, assess the effect of measures taken to reduce the pollution load in the Baltic Sea catchment area			Trends in country-wise inputs (for N and P)- we can only make overall assessment – and on net inputs which is complicated by retention	To evaluated measures on points sources, diffuse sources etc- we should use both the source apportionment, and supplementing data on e.g. treatment of removal % af waste water, no. connected to WWTP, development in fertilizer application, livestock, and even get information of major measures taken. Further as in PLC5 try to make scenarios of potential for further reduction on main N and P pollution sources

Assess the development of nutrient waterborne and airborne loads to evaluate progresses in fulfilling nutrient reduction targets of the Baltic Sea Action Plan from different countries to the different main Baltic Sea sub-basins			Yes!	
Provide information for assessment of long-term changes and the state of the marine environment in the open sea and the coastal zones		Provide data on N and P inputs and trends of inputs to sub-basins since 1994 – but HOLASII might request data for 17 sub-basins		Background information about activities in the catchment area (maybe this could be a separate supporting information section on the HELCOM website?)
Develop standardized methodology to calculate statistical uncertainty on national datasets, methodology for filling in gaps and missing data and development of standardized methodology for evaluating countries progress in fulfilling BSAP nutrient reduction targets				Statistical report published Laboratory intercalibration – done and published
Develop revised and extended PLC guidelines.				On-going. Almost ready!

Annex 5 List of nominated PLC-6 project members

PROJECT MANAGER		
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