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Background

The BASE project started in June 2012 with the objectives to further support the implementation of the BSAP in Russia and to provide input to the upcoming HELCOM Ministerial Meeting. The project is funded by the EU and has a budget of 2,5M€. The project is managed by the Project Implementation Unit (PIU) at the HELCOM Secretariat in cooperation with St Petersburg Public Organisation Ecology & Business. The project implementation phase will end in May 2014. An application for an extension has been submitted. If approved, all activities of the project will be completed by the end of August 2014.

This document contains a progress report on the status of the work, prepared jointly by the BASE PIU and the Russian Partner.

Action required

The Meeting is invited to take note of the progress.

The aim of BASE is to further support the implementation of the HELCOM BSAP in Russia. BASE activities provided input to the HELCOM Ministerial Meeting in 2013. The project is managed by the Project Implementation Unit (PIU) at the HELCOM Secretariat in cooperation with the Russian Partner (RP), St. Petersburg Public Organisation Ecology & Business. BASE utilizes the experience and results of the activities by the BALTHAZAR-Project (Phases I and II). BASE addresses three priority areas of the HELCOM BSAP: eutrophication, hazardous substances, and biodiversity and nature protection. Within BASE, monitoring activities to support and measure the implementation progress within the abovementioned segments are also being carried out.

The implementation of the Project activities is supported by the Project Steering Group (PSG) working according to the agreed ToR and consisting of representatives of the European Commission, Russia, Denmark, Sweden and HELCOM Secretariat. The Project Manager and the Russian Partner Team Leader present progress and seek the advice of the PSG. In addition to the PSG, BASE has a Kaliningrad Working Group coordinated by the Service for ecological control and supervision for Kaliningrad Region. The involvement of authorities in all BASE activities is of utmost importance to the success and sustainability of the project. Moreover, HELCOM has a Memorandum of Understanding with the State Unitary Enterprise "Vodokanal of St. Petersburg" (SUE Vodokanal) regarding BASE activities.

The project is implemented in Russia in cooperation with and with the support of several state actors, such as the Russian Federal Service for Hydrometeorology and Environmental Monitoring (North-West), the Neva-Ladoga Basin Administration, the State Unitary Enterprise Vodokanal of St Petersburg, the Centre for Ecological Safety of Russian Academy of Sciences, the North-West Research Institute of Agricultural Engineering and Electrification of the Russian Academy of Agricultural Sciences (SZNIIMESH), the Atlantic Branch of P.P. Shirshov Institute of Oceanology of Russian Academy of Sciences in Kaliningrad, the St Petersburg State University, the Baltic Fund for Nature of St Petersburg Naturalists Society.

One challenge BASE is addressing is getting more Russian experts involved in HELCOM work on a regular basis. HELCOM Working Groups and projects are kept informed of the progress and, to the extent possible, BASE consultants and experts take part in Working Group meetings to present their most recent relevant findings. BASE is particularly closely involved with the development and operationalization of HELCOM core indicators (CORESET I and II). Close cooperation has been established with LOAD activities. GEAR, LAND and MONAS have been regularly updated. BASE has put a lot of effort into involving Russian experts in Maritime Spatial Planning (MSP) activities, as well as in fisheries activities (a case in point is the Fishing for Space workshop, Nov 2013, where MSP and fisheries issues were discussed together). BASE is also actively contributing to the EU/Russia dialogue on a project level.

The project is in its final months of implementation and several activities are being finalised. Many activities require four seasons and will greatly benefit from allowing implementation to continue until the final date of the project at the end of May 2014. An extension has been applied to allow for activities to continue until May and to leave final reporting for the summer. Pending approval of the application for extension, the project will finish by the end of August 2014.

A recent overview of BASE project activities was given at the BASE Project Meeting in December 2013 where the project took stock of its most recent developments. The presentations can be seen in the [HELCOM Meeting Portal](#), under the folders [Projects](#) » [BASE](#) » [Project Meetings](#) » [Project Meeting 10 December 2013](#). This document summarises the findings.

1. Input to the Ministerial Meeting in Copenhagen October 2013

The Russian Partner had the main responsibility for providing input to the Ministerial Meeting on progress of implementation of the HELCOM BSAP in the Russian Federation regarding the 3 priority areas (eutrophication, hazardous substances and biodiversity) covered by the project. The report submitted can be found on the HELCOM website: www.helcom.fi >> Baltic Sea Action Plan >> National Follow-up >> click on the flag of the Russian Federation.

2. Progress with regard to implementation of the JCP

A report on the current state of affairs with Russian “hot spots” of the JCP Programme was prepared by a BASE consultant in May 2013. The report has been widely shared to HELCOM Groups, Russian authorities, IFIs and other stakeholders. The report was submitted to the HELCOM Ministerial Meeting 2013 and can be found among the official documents of the Copenhagen Ministerial: <http://www.helcom.fi/Ministerial2013/associated-documents/background-documents/>. The report concludes that some “hot spots” could be eliminated from the list based on the progress made to date, some require more work.

Two hot spots from the list (Curonian Lagoon and Vistula Lagoon) were not included in the report and it is the responsibility of PIU and RP to facilitate dialogue between stakeholders in Russia, Lithuania and Poland. Regarding Curonian Lagoon, a meeting with relevant stakeholders from Kaliningrad and Lithuania took place in June 2013 in Kaliningrad. The meeting was organised in the framework of the BASE pilot project on the development of marine protected areas (MPA) in the Baltic Sea through the extension of the Curonian Spit National Park (see below).

Several sectors were represented in the meeting and the participants agreed that there is a need for follow-up discussions with relevant authorities to find a feasible approach and compromise to start the development of a joint management plan for the Curonian Lagoon. A report of the meeting prepared by the BASE Russian Partner Biodiversity expert is available at <http://www.helcom.fi/helcom-at-work/projects/base/events/>.

3. Eutrophication segment

a) [Reduction of nutrient pollution to the Baltic Sea from smaller municipalities and scattered settlements](#)

As many Russian and international actors are paying attention to larger waste water treatment plants, BASE is following up on the work of RusNIP, MOMENT and Coalition Clean Baltic (to name but a few) and focusing on reduction of nutrient pollution to the Baltic Sea from smaller municipalities and scattered settlements. State Unitary Enterprise “Vodokanal of St. Petersburg” is an integral partner in this activity.

An analysis of the nutrient reduction potential of scattered settlements in Leningrad and Kaliningrad regions is carried out by Murkot with the support of FCG International. Technological solutions are being evaluated and awareness-raising workshops in local communities have been and will further be arranged. Those include awareness-raising on phosphorus free detergents. A water supply plan will be developed for a pilot community.

The project has taken a look at a concrete model pilot project for a waste water treatment system on the Isle of Valaam, Lake Ladoga. BASE cannot recommend the chosen system as the most cost-efficient way for small settlements to treat their waste water but can confirm that HELCOM requirements will be met using the chosen technology (biorotor). The final report of the BASE expert on the technical potential of the waste water treatment plan on Valaam has been prepared by TineCoin and can be read [here](#).

b) Preparation of Long-Term Manure Management Plan for Kaliningrad Region

BASE is contributing to sustainable agriculture through its pilot activity on 'promotion of increased capacity for organic manure management in agriculture' in Kaliningrad. The aim of this pilot is to elaborate a draft long-term programme for the utilization of manure generated at farms as fertilizer in Kaliningrad region it is being implemented by The State Scientific Institution North-West Research Institute of Agricultural Engineering and Electrification of the Russian Academy of Agricultural Sciences (SZNIIMESH) with the support of MTT Agrifood Research of Finland.

Data on the amount of produced animal and poultry manure on the farms in Kaliningrad Region has been analysed, waste quality has been chemically analysed, the type and cultivation area of crops has been assessed and a register has been compiled of basic technologies suitable for Kaliningrad region for animal and poultry manure processing. Environmental and technological criteria, guidelines and workshops will be developed and organized at a later stage.

4. Hazardous substances segment

a) Identification of sources and flow patterns of pharmaceuticals (St Petersburg)

This activity has a strong capacity-building component. A study tour to Helsinki for specialists of the laboratory of the SUE Vodokanal of St. Petersburg was organized in March. The study tour included visits to HELCOM, Helsinki WWTP and SYKE laboratory.

Samples have been taken according to the methodology developed together by the Russian Consultant Scientific Research Centre for Ecological Safety of the Russian Academy of Sciences, the Vodokanal laboratory and the EU Expert Envieno. The interim report submitted by the consultant concludes that 40% of the consumption of diclofenac can be found in sewage and that the level of purification of diclofenac from waste water is around 10%. Similar results have been achieved in different cities in Finland and in St. Petersburg.

This project has evoked a lot of interest and the experts have been involved in the activities related to the EU Strategy for the Baltic Sea Region Priority area 3: Reduce the use and impact of hazardous substances (PA HAZARD). The consultants represented BASE in the meeting "Make the Baltic Sea Region a Lead in Sustainable Management for Pharmaceuticals" in June 2013 in Riga and presented a larger view of hazardous substances monitoring in Russia at the EUSBSR Annual Forum in November 2013 in Vilnius. Further outreach will be done for example at the Finnish "Water Supply Days 2014".

b) Identification of microplastics in waste water

A small sampling pilot regarding microplastics in waste water is being developed together with Vodokanal and Helsinki Region Environmental Services Authority HSY. Sampling is planned for February-April 2014.

c) Minimization of the Pregolya river pollution with oil products from Kaliningrad port oil terminal

The Kaliningrad port oil terminal is one of the "hot spots" (#71) identified in the JCP Programme. The aims of this activity are to: assess the contamination of the site and pollutants leaching from the site to the Baltic Sea, recommend measures for remediation of the Kaliningrad marine oil terminal site and to evaluate further steps needed in order to fulfil the criteria for deletion from the HELCOM Hot Spot list.

The Russian expert TehnoTerra has carried out detailed technical analysis and drilling and regularly reported on the findings with the support of Pöyry Finland. The results and possible ways of remediation have been discussed with local authorities and other stakeholders (Kaliningrad, Nov 2013).

The following works have been carried out to date: 1) Screening the oil contamination on the premises of the Kaliningrad port oil terminal and the adjacent water area of the Pregolya river; 2) Analysis of the obtained information and development of the descriptive model of the distribution and specifics of the contaminant migration; 3) Scenario development (absence of any additional nature protection measures); 4) Investigating prospects for the development of the main economic activities of the Kaliningrad port oil terminal and characterization of possible changes of the impact of the enterprise on the water medium of the Pregolya river.

The following results have been achieved: 1) A map of distribution of soil contamination with oil products by depth and in layout has been compiled; 2) The thickness of the contaminated layer of the soils has been determined; 3) Sites of the highest thickness of the oil product plume in the soil in order to work out a project for remediation of the territory have been established; 4) The dynamics of the level of the ground waters have been determined and the relationship with the dynamics of the water level in the Pregolya river established.

The project will further develop an action plan and an environmental monitoring programme for the oil terminal.

5. Biodiversity segment

a) [Support for development of a salmon management plan in the Luga river](#)

The aims of the project are to: 1) Analyze available materials concerning wild salmon in the Luga River; 2) Carry out research activities; 3) Promote activities to ensure that the recommendations of the SALAR project and the HELCOM BSAP would materialize also in the Russian Federation; 4) cooperate with relevant stakeholders (authorities, researchers, general public) in order to pave the way for better commitment and approval of a management plan by authorities.

The project activities started in May 2013. An Advisory Board (AB) was established to exchange ideas and acknowledge results of already completed projects related to salmon stock management in order to avoid overlap in upcoming projects developed by different institutions/countries. The AB consists of representatives from the State Research Institute on Lake and River Fisheries (GosNIORKh)/Russia, Coalition Clean Baltic/Sweden, Finnish Game and Fisheries Research Institute (RKTL), Inland Fisheries Institute, Department of Migratory Fishes/Poland, representatives of the Russian authorities (e.g. Federal Fishery Agency/Rosrybolovstvo, Department of fisheries, Committee for agricultural and fishery complex of Leningrad region, Neva-Ladoga Basin Directorate, Federal Service for Supervision in the Use of Natural Resources/Rosprirodnadzor) and NGOs (Biologists for Nature Conservation, Center of the Baltic Salmon, Baltic Fund for Nature). The first meeting was held in September 2013 in St. Petersburg/Russia. Minutes and presentations are available at: <http://www.helcom.fi/helcom-at-work/projects/base/events>.

The project experts from All-Russian Social Organisation "All-Russian Society of Nature Protection", Leningrad Region office (ARSoNP) have taken active part in HELCOM meetings. The project has been presented at the workshop on Fisheries and Maritime Spatial Planning (MSP) "Fishing for space" held in November 2013 in Vilnius/Lithuania, BASE project meeting, held in December 2013 in Helsinki/Finland and at the Task Force on migratory fish species (HELCOM FISH-M 1/2014) held in January 2014 in Berlin/Germany.

The latest report accounts for the implementation of activities May-November 2013. Further meetings with stakeholders and the AB will be held in the course of the spring. Both the summer and autumn field works provided a vast amount of new and valuable data. There are already some interesting findings concerning the share of hatchery fish in collected samples. The recommendation for the final report is to analyze the effectiveness of the actual management plan, especially in regard to stocking policy. The final report is expected in May 2014.

b) Development of marine protected natural areas (MPA) in the Baltic Sea through extension of the Curonian Spit National Park by accession of the adjacent water areas for maintaining ecological coherence of MPA network in the South-Eastern part of the Baltic Sea

The objective of the activity is to contribute to achieving a favourable status of Baltic Sea biodiversity by including the adjacent water areas within the boundaries of the Curonian Spit National Park. This will improve the ecological coherence of the marine SPNAs (Specially Protected Nature Areas) network.

The experts' main task is to prepare documentation in consultation with relevant federal and regional authorities and submit an application for extension of the marine protected zone of the Curonian Spit to the Ministry of Natural Resources and Ecology of the Russian Federation. A meeting with relevant stakeholders took place in June 2013 in Kaliningrad. The event was hosted by the Curonian Spit National Park authorities.

Following the discussion, it was decided that, considering the circumstances and the Russian legislation, it is more realistic to prepare documentation supporting the establishment of a *protected zone* instead of a *protected area* adjacent to the Curonian Spit National Park. From the HELCOM perspective, marine *protected zones* and *protected areas* fall into the same category of Baltic Sea Protected Areas (BSPA). Establishment of a *marine protected zone* required substantial changes in the experts' Terms of Reference including the budget. The majority of the tasks related to the preparation of the documentation are carried out by the Biodiversity Conservation Center in Moscow and coordinated by EcoMMAC from Kaliningrad.

Minutes and presentations from the meeting are available at <http://www.helcom.fi/helcom-at-work/projects/base/events/>.

6. Monitoring activities: Assessment and quantification of nutrient and hazardous substances loads to the Baltic Sea from Leningrad Oblast, transboundary rivers and from Kaliningrad Oblast, and the evaluation of their sources

This activity contributes to one of the key tasks of HELCOM by providing input to the Pollution Load Compilations and building monitoring capacity in Russia through joint sampling, in parallel with intercalibration activities. Nutrient and hazardous substances data has and will be further collected on previously unmonitored tributaries of the Neva and the Pregolya.

a) **Nutrients (Leningrad and Kaliningrad)**

Two rounds of nutrient sampling have been completed in Leningrad region. The first round included parallel sampling by EU Expert Pöyry Finland and Principal Consultant the Federal budget state authority "North-West Department of Hydrometeorology Service".

Two rounds of nutrient sampling have also been carried out in Kaliningrad where the second round included parallel sampling by EU Expert Pöyry Finland and Principal Consultant BIEH (Baltic Institute for Ecology of Hydrosphere).

All new data has been presented to LOAD and PLC meetings (August, October 2013) and entered into the HELCOM Map and Data service where it is freely available. Further sampling will take place in order to allow for representative data throughout the year and four seasons.

b) Hazardous substances (only Kaliningrad)

Hazardous substances will be sampled only in one screening round in the Pregolya and its tributaries. Sampling will take place in April when water flows freely again after the winter. The sampling programme is still being designed by the EU Expert and the Russian consultant.

7. Development of indicators

This activity supports the development of biodiversity and hazardous substances indicators with targets that reflect good environmental status for HELCOM. The work is directly related to the HELCOM CORESET I and II projects. An important part of the project is to improve Russian capacity to participate in the operationalization of those indicators. The expert, St. Petersburg State University, is in close contact with the CORESET II Project Manager and has submitted several data sets to date.

8. Public awareness

All activities described above include a public awareness component. Experts take part in meetings and share their findings with the scientific community, decision-makers and the general public. One of the main events where experts and consultants working within BASE share the information and analysis gathered, is the Environmental Forum **Baltic Sea Day** taking place each year in March. The upcoming event to be held on 19-21 March 2014 in St. Petersburg is an important platform for presenting BASE results.

In addition to these constantly on-going chances of presenting BASE, there are two specific public awareness activities within the project. One is the organisation of a study tour for ca. 30 students from St. Petersburg and Kaliningrad in spring 2014. The programme of the study tour consists of two 6-day blocks during which students will visit different locations in St. Petersburg region and Leningrad region to familiarize themselves with the results of BALTHAZAR and BASE projects. Lectures will be given by experts and consultants involved in the implementation of different components of the BASE project.

In regard to awareness-raising related to the assets of the Curonian Spit and the Curonian Lagoon, a number of events for the general public will take place in May 2014 in Kaliningrad. The events will consist of TV spots, articles in local newspapers and an interactive event for families. Activities will be prepared in close cooperation with the Curonian Spit National Park and will be focused on promotion of environmental values of the marine protected zone and the Curonian Spit.

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For up-to-date information on BASE activities, please go to:
<http://www.helcom.fi/helcom-at-work/projects/base/>.