



Document title	Draft project proposal on reduction of nutrient releases in areas critical to nutrient losses
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Agenda Item	7 –Prioritization of measures in areas critical to nitrogen and phosphorus losses
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Background

The 2013 HELCOM Ministerial Meeting agreed to make use of appropriate policy and economic instruments such as full implementation of EU aquis including EU Marine Strategy Framework Directive, **Nitrates Directive**, Water Framework Directive, Integrated Pollution Prevention and Control and Common Agricultural Policy for EU Member States and funding opportunities on national and international level, as well as economic levies and incentives, **in order to minimize nutrient losses in agriculture** and thus contribute to keeping the nutrient inputs to the Baltic Sea below the Maximum Allowable Inputs.

The Ministerial Meeting considered that a first step would be implementation of the measures aimed at improvement of the manure handling practices, in particular best available technics (BAT), at the facilities located in **the areas critical to nutrient losses**.

The attached document contains a draft project proposal with the objective - reduction of nutrients discharge to the Baltic Sea from intensive animal farming in catchment areas highly vulnerable to nutrient losses. The draft project proposal was considered at the Steering Committee meeting of EU Strategy for the Baltic Sea Region Priority Area Nutri and will be considered as a potential Flagship project for the Priority Area.

Action required

The Meeting is invited to consider the project idea and discuss possible next steps, including potential lead party and partners.

DRAFT PROJECT DESCRIPTION

Objective: reduction of nutrients discharge to the Baltic sea from intensive animal farming in catchment areas highly vulnerable to nutrient losses.

Background

Eutrophication process is considered the major threat for the Baltic sea. Eutrophication arises from the oversupply of nutrients, which induces explosive growth of plants and algae which consequently leads to oxygen depletion of water. The latest observation of the eutrophication status of the Baltic sea indicate that nearly the entire sea area is still affected by eutrophication.

Implementation of the national measures by the HELCOM Contracting Parties has led to a reduction of 18% nitrogen and 16% phosphorus to the Baltic Sea since 1994. However, compared to the period 1997-2003, which was used as a reference in the Baltic Sea Action Plan, the total nutrient reduction was only about 10% in average in the period 2008-2010.

The last data on nutrients input to the Baltic Sea reported by HELCOM show that about 45% of both the nitrogen and phosphorus load was estimated to be from diffuse sources. The contribution of the agricultural sector to the diffuse sources load is 70-90% for nitrogen and 60-80% for phosphorus. In other words, the agricultural sector contributes from 30% to 40% of the total nutrient input to the Baltic Sea being the largest single source of nutrients load in the region.

Despite strict requirements for organic fertilizers and manure handling practices are enforced in part II Annex III of the Helsinki Convention (1992) the only EU Nitrates Directive (1991) aims to protect water quality across Europe by preventing nitrates from agricultural sources polluting ground and surface waters and by promoting the use of good farming practices.

HELCOM requirements for minimum manure storage capacities, adopted already in 2004, and the requirements regarding manure application rates, introduced in 2007 (BSAP), designate all the catchment area of the Baltic sea as a zone vulnerable to nutrients.

The same time, Article 3 of the Nitrates Directive postulates that Member States are required to identify polluted waters or waters at risk of pollution, according to the criteria defined in Annex I to the Directive, and have to designate all areas that drain into identified waters and contribute to pollution as nitrate vulnerable zones (NVZ). The Directive gives the possibility to Member State not to identify specific vulnerable zones, if they establish and apply action programmes throughout their national territory (Article 3(5)). The requirements of Nitrogen directive only address nitrate pollution, while phosphorus runoff from agricultural areas is equally or even more important, especially in relation to prevention of pollution from manure handling.

A report on the implementation of EU Nitrates Directive concerning the protection of waters against pollution caused by nitrates from agricultural sources shows that since 2008, the designation of NVZ has not progressed much with several countries still lagging behind. In addition, neither Russia nor Belarus are applying similar requirements for designation of Nitrate Vulnerable Zones due to lacking legal provisions for establishment of such areas.

The project is aimed to facilitation of implementation of the agri-environment legislation in catchment areas highly vulnerable to nutrient losses from intensive animal farming. The areas with greatest risk of manure-based nutrients ending up in BS marine environment will be identified. The priority measures aimed to implementation of the current legislation in the most sensitive areas will be developed. Manure handling practices and related facilities in pilot cases will be upgraded to the quality which complies current agri-environment legislation.

The project objective will be reached through:

1. Evaluation of the compliance of the current manure handling practices in BS catchment area to existing agri-environment legislation.
2. Scientifically based identification of nutrient vulnerable areas.
3. Prioritization of measures and identification of pilot cases for comprehensive development of manure handling practice.
4. Establishing agri-environment investment facility and enhancing monitoring capacity.

Project working packages (WP).**WP 1. Project management.**

Nr	Action	Outcomes	Notes
1.1	Project management		

WP 2. Communication and dissemination.

Nr	Action	Outcomes	Notes
2.1	Communication and Dissimilation Activities and stakeholder/industry engagement in the project	Feedback from stakeholders for identification of the needs of manure handling practices development	
2.2	Designing the WEB based information resource	WEB based public resource containing: maps, documents, pictures.	Which platform can be used – HELCOM?

WP 3. Evaluation of the compliance of the current manure handling practices in BS catchment area to existing agri-environment legislation.

Nr	Action	Outcomes	Notes
3.1	Evaluating the legal frameworks across the BSR concerning definition of priority geographic areas for stricter environmental legislation taking into account comparable & relevant RU and BY regimes.	A report on the legal frameworks across the BSR	The responsible competent national authorities have to be involved. Current national legislation has to be evaluated with respect to compliance with Helsinki Convention.
3.2	Establishing state of the art of implementation and enforcement of current existing legislation with protection of the waters from nutrients	A report on state of the art of implementation of current legislation.	

WP 4. Scientifically based identification of nutrient vulnerable areas (NVA).

Nr	Action	Outcomes	Notes
4.1	Setting up criteria for identification of the NVZ (areas critical to nitrogen and phosphorus losses) for the Baltic sea catchment are.	The document defining “nutrient vulnerable areas” and criteria for its identification	
4.2	Compilation of data required for the NVZ (areas critical to nitrogen and phosphorus losses) identification.	The report on required data availability. Spatial database compilation.	Are the proper spatial data available in all the countries? If data available at national level are they compatible?
4.3	Development of an integrated common guidelines for mapping of nutrient vulnerable areas	Guidelines for mapping of nutrient vulnerable areas	
4.4	Mapping of the NVZ (areas critical to nitrogen and phosphorus losses) according to the criteria.	Digital maps of NVA.	Do we need adoption of the results?

WP. 5. Prioritization of measures and identification of pilot cases for comprehensive development of manure handling practice.

Nr	Action	Outcomes	Notes
5.1	Identification of manure handling practices (storage capacity and handling).	The report describing	
5.2	Identification of measures and mapping of possibilities and needs to develop manure handle practices for single farms and for the selected NVZ(s).	Priority list of the measures on manure handling practice improvement for single farms and for the selected NVZ(s)	Territory of Non Eu countries and can be also considered.
5.4	Implementation of the measures on best environmental practices integration and manure storages improvement.	XX manure storages improved and XX best environmental practices implemented.	

WP 6. Development proposals for establishing agri-environment investment facility and enhancing monitoring capacity.

Nr	Action	Outcomes	Notes
6.1	Identification of national and international financial tools for supporting implementation legal environmental requirements in animal farming (or agriculture)	A report on available financial tools.	
6.2	Engineering of grant and loan mechanisms and establishing criteria and capacity for project evaluation.	Description of the financial tool, legal and financial substantiation.	
6.3	Developing proposals for establishing an agri-investment facility providing comprehensive services on integration of cost-efficient environmental practises	Written proposal for the international and national financial institutes.	
6.4	Enhancing nutrient load monitoring capacity and developing a system to follow up measures implemented in the NVAs (NVZ).	Project proposal for development and maintaining of the system to follow up implementation measures aimed at reduction nutrient losses in NVA.	

Participant list:

1. Swedish University of Agricultural Sciences
2. MTT Agrifood Research Finland
3. NW Research Institute of Agricultural Engineering and Electrification
4. JTI (Agro-technological institute in Uppsala)
5. Latvia (ZSA-Latvian Farmers' Parliament)
6. Helsinki commission
7. Central Research Institute for water management. (Belorus)
8. NW Research Institute of Agricultural Economics and Organisation (NWRIAEO)
9. Finnish Environment Institute (SYKE)
10. Lithuanian Institute of Agrarian Economics (LAEI)
11. Warsaw University of Life Sciences (WULS)