Document title	Additional information on the BSAP actions relevant for the Agri group
Code	3-1
Category	DEC
Agenda Item	3 – Update of the Baltic Sea Action Plan
Submission date	6.4.2021
Submitted by	Secretariat
Reference	

Background

As outlined in the workplan for the BSAP update, the HELCOM Working Groups will in spring 2021 collect additional information for the actions planned to be included to the updated BSAP. HOD 59-2020 agreed that such additional information include, for example, the possible effect of the action, relevant pressures and activities targeted by the actions and the implementing entity. The additional information is planned to be used to support the implementation of the actions as well as the follow-up. Originally, the information was planned to be included as an annex to the updated BSAP and approved by HOD 60-2021 in June 2021, but HELCOM 42-2021 agreed that, instead, the information should be presented as a supporting document for the Ministerial Meeting 2021 to provide context for and support the implementation and follow up of the actions. HELCOM 42-2021 also agreed that the supporting document will be submitted for review to HOD 60-2021 and for approval to an intersessional HOD meeting in early September in 2021. HELCOM 42-2021 further agreed that there is no need to collect information on the potential effect for the actions that are categorized as supporting actions.

AGRI 11-2010 considered and commented the draft structure of the then planned BSAP annex. The annex to the present document contains all the draft actions relevant for the Working Group. The draft additional information on the type, rationale, potential effect, implementing entity (national or joint), overseeing Working Group/Expert Group and indicator for achievement prepared by the Secretariat is presented for actions that were provisionally agreed by HELCOM 42-2021 (coloured green). The actions relevant for the Agri Group have been considered by the Segment Team on Eutrophication. The actions that are still under discussion are coloured yellow if they have been already discussed by a Segment Team. The information is mainly derived from synopses (for proposed new actions only) and comments made during past meetings where the actions have been considered (e.g. Working Group, Expert Group and Segment Team meetings). The Meeting will be invited to develop the information further and plan for its finalization for review by HOD 60-2021 and approval at the intersessional HOD meeting in early September.

A draft list of pressures and activities was sent via email in the beginning of February to all HELCOM Working Groups for intersessional review. The reviewed list will be used by all Working Groups to link the activities and pressures to the actions. The attached Annex links the relevant activities and pressures to the actions by utilizing the list of activities and pressures reviewed by HELCOM Working Groups intersessionally. The list is included as an Excel attachment.

The target years for the actions that will be included in the supporting document will not be considered by this Meeting but by DG BSAP Segment Teams.

Action requested

The Meeting is invited to:

- take note of the list of activities and pressures;
- consider supplementary information on the actions within the group's mandate and agree on the proposed formulations;
- agree on further steps to accomplish the work in line with the procedure agreed by HELCOM 42-2021.

Table 1. Draft supplementary information to be provided for the actions relevant for the Agri group in the eutrophication segment

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	Theme: Agriculture								
EN01	Establish site specific buffer zones to reduce nutrient losses from agricultural land, for example on parts of fields where surface runoff and erosion occurs, along ditches or at surface water inlets	Measure	A site-specific buffer zone (perennial crop such as grass) can be established and maintained on parts of the agricultural land where erosion and surface runoff frequently occur. It can, for example, be on erosion-prone parts of a field, along ditches, streams and lakes or at surface water inlets to the drainage system. The location, size and shape of the buffer zone is adapted to the specific site.	The effectiveness depends on where the zones are placed. If they are located where surface runoff and erosion occur, they can significantly reduce erosion. They also reduce the risk of phosphorus losses caused by soil tillage close to ditches and watercourses and fertilizers being unintentionally spread outside the field or directly into the water.	National	AGRI	Relevant regulation or support scheme in place for establishing site-specific buffer zones. Advice and/or modelling available for farmers to find suitable sites.	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN02	Optimize fertilization rates site specifically and promote precision fertilization practices in order to increase nutrient use efficiency and reduce nutrient losses							Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN03	Develop and apply the best practices to improve soil structure and aggregate stability on clay soils to reduce phosphorus losses from agricultural lands, for example by using soil structure lime or	Measure	A large proportion of phosphorus losses from clay soils are in particulate form and measures that improve soil structure and increase aggregate stability have potential to reduce phosphorus losses from these soils.	Studies on structural liming in Sweden have showed 0-60% reduction of phosphorus losses from clay soils. Studies in southwestern Finland, have demonstrated that gypsum amendment of fields reduces	Joint/ national	AGRI	Best practices to improve soil structure and aggregate stability on clay soils to reduce phosphorus losses from agricultural lands, for example by using soil structure lime or gypsum are compiled in a regional document.	Agriculture	Input of phosphorous — diffuse sources, point sources

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	gypsum		Incorporation of structural lime (mix of CaO and Ca(OH)2) or gypsum (CaSO4 · 2H2O) into the topsoil are measures which immediately improve the soil structure.	phosphorus loads from clay fields by around 50%. Gypsum contains sulphate, which is gradually flushed away from soil to nearby waterways, and thus gypsum can only be utilized in arable fields along waterways running into the sea.			The best practices are applied nationally in areas where the measures are applicable e.g. with the help of support schemes, regulation or guidelines.		
EN04	Increase organic farming by at least [25%] of agricultural land to reduce the inputs of nutrients and hazardous substances to the Baltic Sea							Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources; Input of other substances (e.g. synthetic substances, non-synthetic substances, radionuclides) — diffuse sources, point sources, atmospheric deposition, acute events
EN05	Discourage application of manure and other organic fertilizers in the autumn without sowing winter crops							Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous —

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
									diffuse sources, point sources
EN06	Improve knowledge exchange by establishing dialog between farmers, authorities and decision makers	Supporting action	Improved knowledge exchange from farmers to the decision makers and vice versa is important for making decisions that are applicable in the farming practices, and communicating the reasoning behind the decisions in an understandable way is important to make them better acceptable among farmers. Direct contacts should be promoted for communication between scientists, policymakers and farmers.		Joint/ National	AGRI		Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN07	Enhance mutual learning among farmers on best practices and innovative technologies	Supporting action	Transfer of technological innovations and mutual learning among farmers across several BSR countries can be one of the effective and relatively cost-efficient measures that could help to disseminate and adopt nutrient abatement sensitive technologies for less price and at the same time save spending in other cost categories.		National	AGRI	Farmer mutual learning groups, cross visits, demonstration activities, collaboration with researchers, advisors and technology companies in disseminating and introducing new technologies.	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN08	Develop BAT/BEP for reducing ammonia and GHG emissions from livestock housing, manure storage and							Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	spreading								
EN09	Develop recommendations for manure management specifically for horses, sheep, goats, and fur farming							Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EE01	Apply as a minimum the updated EU's BREF document and Conclusions on BAT for intensive rearing of poultry and pigs, especially for the facilities located within areas critical to nutrient losses	Measure	The EU BAT reference document (BREF) 'Intensive Rearing of Poultry or Pigs' presents the Best Available Technologies for intensive rearing of poultry and pigs. Utilizing BAT especially within areas critical to nutrient losses is important to minimize nutrient emissions.	Implementing BAT will reduce nutrient emissions. The possibility to prevent or reduce nutrient emissions by using BAT is described in the document for different technologies.	National	AGRI	The EU BREF or similar national document is utilized when permitting intensive rearing of poultry and pigs.	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EE02	Review national regulation and voluntary measures and – if relevant – implement further or revised measures, as compiled in the revised palette of measures for reducing phosphorus and nitrogen losses from agriculture.	Measure	The revised palette of measures for reducing phosphorus and nitrogen losses from agriculture adopted at the Ministerial Meeting 2013 is intended to support implementation of part II Annex III of the 1992 Helsinki Convention "Prevention of pollution from agriculture". The Palette contains technical, managerial and legislative measures, based on best available	Implementing the measures can reduce nutrient inputs from agriculture. The potential effect of the different measures is included in the palette of measures.	National	AGRI	Review of national and voluntary agri-environmental measures. Measures included in the palette of measures implemented into regulation or voluntary measures based on the review, if found relevant.	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
			knowledge and sought to help in implementation of the aforementioned provisions.						
EE03	Implement and enforce the provisions of part 2 of Annex III "Prevention of pollution from agriculture" of the 1992 Helsinki Convention	Measure	Part 2 of Annex III of the Helsinki Convention sets out provisions for prevention of pollution from agriculture. By 2021 the provisions have yet not been implemented by all HELCOM countries.	Implementing the provisions of the annex on plan nutrients, plant protection products and environmental permits will reduce the input of nutrients and hazardous substances.	National	AGRI	Provisions of part 2 of Annex III "Prevention of pollution from agriculture" of the Helsinki Convention implemented and enforces nationally.	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources; Input of other substances (e.g. synthetic substances, non-synthetic substances, radionuclides) — diffuse sources, point sources, atmospheric deposition, acute events
EE04	Agreement on national level by 2023 on measures to reduce nutrient surplus in fertilization practices to reduce nutrient losses	Measure	A large nutrient surplus in fertilization practices increases the risk of nutrient losses. There are several measures, technologies and restrictions that can be applied to reduce the nutrient surplus.	Reducing the nutrient surplus in fertilization practices will decrease the risk of nutrient losses. The potential effect of the some of the possible measures that can be utilized is included in the palette of measures.	National	AGRI	Agreement on national level on measures to reduce nutrient surplus in fertilization practices to reduce nutrient losses	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EE05	Investigate opportunities for taxation of mineral fertiliser and/or taxation	Measure	Financial instruments such as taxes or payments can be utilized to incentivise making	Potential effects will be investigated as part of the action.	Joint/ national	AGRI	A HELCOM report on experiences in the BSR countries and the effects of financial instruments such	Agriculture	Input of nitrogen — diffuse sources, point sources,

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	of nitrogen surplus and/or payments for agri-environment measures [by 2024], and implement them building on the experiences available in various countries.		better use of nutrients available in manure and other organic fertilizers, thus reducing mineral fertilizer use and enhancing nutrient recycling and reducing nutrient losses.				as taxation of mineral fertiliser and/or taxation of nitrogen surplus and/or payments for agri-environment measures to enhance nutrient recycling and reduce nutrient losses. Suitable measures implemented nationally building on the experiences available in various countries.		atmospheric deposition; Input of phosphorous — diffuse sources
EE06	Apply innovative water management measures where appropriate, for example, lime filter ditches, sediment traps and controlled drainage, and nature-based solutions, such as two-level ditches and constructed wetlands, when upgrading and renovating agricultural drainage systems	Measure	Upgrading and renovating agricultural drainage systems is currently topical in many Baltic Sea region countries. Applying innovative water management measures where appropriate, for example, lime filter ditches, sediment traps and controlled drainage, and nature-based solutions, such as two-level ditches and constructed wetlands, can reduce nutrient losses.	Innovative water management measures can reduce the input of nutrients from agriculture. The potential effect of some of the proposed measures is included in the palette of measures.	National	AGRI	Relevant legislation, advice and/or support scheme is in place to support the application of innovative water management measures.	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
Theme: Atmospheric nitrogen emissions									
EE16	Revise the HELCOM Recommendation 24/3 on "Measures aimed at the reduction of emissions and discharges from agriculture" ensuring reduction of agricultural ammonia emissions and considering relevant BAT	Measure	According to the EMEP assessment of emissions of nitrogen in the region and its deposition on the Baltic Sea water area, proportion of nitrogen emissions from agriculture has increased and it has been acknowledged that some	The revised HELCOM Recommendation 24/3 will be a tool to reduce ammonia emissions in the Baltic Sea region.	Joint	AGRI	Revised HELCOM Recommendation 24/3 on "Measures aimed at the reduction of emissions and discharges from agriculture" ensuring reduction of agricultural ammonia emissions and considering relevant BAT and BEP	Agriculture	Input of nitrogen — diffuse sources, point sources, atmospheric deposition

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	and BEP		countries are at risk to exceeding national ammonia emission ceilings of the NEC directive. It has been agreed that the Recommendation 24/3 is outdated and requires revision.						
Theme: Nutrient recycling									
EE07/ EN10 a/ EN10 b	Create legal and institutional tools to advance towards making annual field-level fertilization planning and farm-gate nutrient balancing for nitrogen (N) and phosphorus (P) a requirement for all farms in the Baltic Sea Region to prevent nutrient surplus on farmlands							Agriculture;	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN11 / EE08	Implement adequate measures, especially in agriculture and wastewater management, to achieve the objectives of the Baltic Sea Regional Nutrient Recycling Strategy							Agriculture; Waste waters (urban, industrial, scattered dwellings, stormwaters)	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN12	Optimize the use of recycled nutrients in agriculture making use of best available technologies and fertilize according to							Agriculture; Waste waters (urban, industrial, scattered dwellings, stormwaters)	Input of nitrogen — diffuse sources, point sources, atmospheric deposition;

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	crop needs								Input of phosphorous — diffuse sources, point sources
EN13	Develop safety standards for recycled fertilizer products and minimise the occurrence of harmful compounds in these products to comply with the standards							Agriculture; Waste waters (urban, industrial, scattered dwellings, stormwaters)	Input of heavy metals; Input of microbial pathogens; Input of pharmaceuticals; Input of other substances (e.g. synthetic substances, non-synthetic substances, radionuclides) — diffuse sources, point sources, atmospheric deposition, acute events
EN14	Increase the knowledge and promote education and advisory services on nutrient recycling							Agriculture; Waste waters (urban, industrial, scattered dwellings, stormwaters)	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources
EN15 / EN17	Create a market for recycled fertilizer products to support their production and use by setting incentives and making their use equally attractive to farmers as the use of mineral							Agriculture; Waste waters (urban, industrial, scattered dwellings, stormwaters)	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous —

Code	Action	Type of action	Rationale	Potential effect (if available)	Implemented by	Overseeing WG/ EG	Indicator for achievement	Activities	Pressures
	fertilizers								diffuse sources, point sources
EN16	Enhance cooperation and share experiences between sectors and actors to create a holistic view on sustainable food systems including nutrient recycling across sectors							Agriculture; Waste waters (urban, industrial, scattered dwellings, stormwaters)	Input of nitrogen — diffuse sources, point sources, atmospheric deposition; Input of phosphorous — diffuse sources, point sources