



Document title	Draft update of HELCOM Nutrient Input Reduction Scheme
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Background

RESSURE 11-2019 considered and in general welcomed the proposal to update the textual part of the HELCOM nutrient input reduction scheme. Participants also commented on the proposed text as given in Annex 1 to the document. The meeting agreed in general on the proposed approach to update the values for input ceilings.

Nevertheless, the participants pointed out that the presented values are of indicative character, and they will be further improved utilising the best available scientific knowledge, which requires continuation of the discussion on the details of calculations with national experts in the PLC Project Implementation Group. PRESSURE 11-2019 also recommended to communicate the proposal with the Heads of Delegation by submitting the proposal for commenting to HOD 57-2019.

The meeting also proposed to convene a workshop back-to-back with PRESSURE 12-2020 to discuss all aspects of the calculation.

This document contains the proposal to update the HELCOM nutrient input reduction scheme, incorporating values for nutrient input ceilings (NIC) and also some of the concrete proposals by PRESSURE 11-2019. Recommendation of PRESSURE 11-2019 and proposals by individual countries are given in Annex 1.

Outcomes of the discussion at HOD 57-2019 (10-11 December 2019) will be provided as additional document after the meeting.

Action requested

The Meeting is invited to consider the draft update of the HELCOM nutrient input reduction scheme and to further elaborate the document, taking into account the recommendation by HOD 57-2019 which will be available after the meeting.

Requirements for nutrient input reduction to reach the goal towards a Baltic Sea unaffected by eutrophication (HELCOM nutrient input reduction scheme)

WE ACKNOWLEDGE the progress in reduction of input nutrients to the Baltic Sea achieved by all countries in the last decades which resulted in the total reduction of nitrogen and phosphorus input to the Baltic Sea by 14 and 24 percent respectively, but **WE ALSO RECOGNIZE** that eutrophication remains one of the major environmental problems of the Baltic Sea and that the required reduction of environmental pressure on the marine ecosystem caused by nutrient load has not been reached,

WE RE-ITERATE that the maximum allowable inputs of nutrients - indicating the maximal level of inputs of water- and airborne nitrogen and phosphorus to Baltic Sea sub-basins – remain the regional targets to reach good environmental status of the Baltic Sea,

WE ALSO AGREE that national nutrient input targets should correspond to the input targets set for the Baltic Sea sub-basins, reflecting fair share of the contribution of all Baltic Sea countries and other sources of nutrients to the total nutrient load and assuring the good environmental status of the Sea in terms of eutrophication,

BEARING IN MIND that the figures in the HELCOM nutrient reduction scheme are based on the best available scientific information, **WE STRESS** that the Scheme is the subject for reviewing as necessary using a harmonised approach and the best available scientific knowledge.

WE ACKNOWLEDGE that the maximum nutrient input to the Baltic Sea that can be allowed and still reach good environmental status with regard to eutrophication is 792,209 tons of nitrogen and 21,716 tons of phosphorus,

WE STRESS that the achievement of good environmental status in relation to eutrophication in the Baltic Sea also relies on additional reduction efforts by non-Contracting Parties as follows: [18720] tons of airborne nitrogen from non-Contracting Parties assuming full implementation of the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone of the UNECE Convention on Long-range Transboundary Air Pollution until 2020; [3230] tons of waterborne nitrogen and [800] tons of waterborne phosphorus from non-Contracting Parties assuming that they take the same responsibility to reduce nutrients input as the Contracting Parties,

RECALLING the decision of the IMO to establish NECA in the Baltic Sea and North Sea on reduction of airborne nitrogen pollution from shipping which will lead to the reduction of [6930] tons of nitrogen,

WE FURTHERMORE AGREE that, based on the currently available data on nutrient fluxes in the Baltic Sea marine ecosystem, the maximum allowable inputs of nutrients for the Baltic Sea sub-basins to reach good environmental status are as follows:

Baltic Sea Sub-basin	Maximum Allowable Inputs (MAI)	
	TN, tonnes	TP, tonnes
Kattegat	74,000	1,687
Danish Straits	65,998	1,601
Baltic Proper	325,000	7,360
Bothnian Sea	79,372	2,773
Bothnian Bay	57,622	2,675
Gulf of Riga	88,417	2,020
Gulf of Finland	101,800	3,600
Baltic Sea	792,209	21,716

RECOGNIZING the delay between action in the catchment and their effect on reduction of nutrient inputs **WE AGREE** to take all possible actions [by 2020^{*)}] to achieve national nutrient input ceilings for each sub-basin by 20XX. **WE ALSO AGREE** that ~~national nutrient net~~ input ceilings define are maximum allowable inputs via water and air to achieve GES for Baltic Sea sub-basins. of nutrients integrating waterborne (direct coastal point sources and discharges from rivers), airborne (atmospheric deposition from a country or a group of countries) and transboundary (input via rivers through another country) inputs.

AKNOWLEDGING that almost half of the waterborne input of nutrients reaches enters the Baltic Sea via transboundary rivers **WE AGREE** onto set nutrient input ceilings for 9 major transboundary rivers, addressing inputs from the whole river catchment areas all territories within transboundary river basins, including coastal territories, separately from the remaining territory of these countries.

WE AGREE on the following nutrient input ceilings:

Net nutrient input ceilings for nitrogen for HELCOM countries, transboundary rivers and other sources:

	BOB	BOS	BAP	GUF	GUR	DS	KAT	BAS
DE	938	3832	31134	1632	1737	22022	4467	65762
DK	278	1122	8644	417	460	27794	27830	66545
EE	112	395	1426	11242	13020	21	23	26239
FI	34786	28014	1762	15505	293	71	85	80517
LT	107	483	3492	303	459	61	76	4982
LV	73	322	2690	244	12149	29	33	15541
PL	662	3054	34225	1396	1586	1379	1383	43685
RU	832	1947	7062	22697	659	222	236	33654
SE	17567	31896	29600	621	522	5640	31438	117283
OC	2068	7575	41538	4249	2960	8160	7807	74357
BSS	121	472	2082	262	155	256	245	3593
NOS	78	258	1312	110	83	343	377	2561
NEMUNAS			28295					28295
BARTA			927					927
VENTA			5819					5819
LIELUPE					15768			15768
DAUGAVA					38568			38568
ODER			47546					47546
VISTULA			72149					72149
PREGOLYA			5298					5298
NEVA				43123				43123
MAI	57622	79372	325000	101800	88417	65998	74000	792209

^{*)} This date was agreed in the BSAP. At PRESSURE 11-2019 Germany proposed 2027.

Waterborne nitrogen input ceilings for HELCOM and non-HELCOM countries within transboundary river basins:

RIVER	NIC	DE	FI	LT	LV	PL	RU	BY	CZ	UA
NEMUNAS	28295			18460				9835		
BARTA	927			177	750					
VENTA	5819			1948	3871					
LIELUPE	15768			4806	10962					
DAUGAVA	38568			1008	15558		4310	17692		
ODER	47546	2505				42218			2824	
VISTULA	72149					68281		2484		1384
PREGOLYA	5298					2160	3138			
NEVA	43123		4740				38383			

Net nutrient input ceilings for phosphorus for HELCOM countries, transboundary rivers and other sources:

	BOB	BOS	BAP	GUF	GUR	DS	KAT	BAS
DE			72			347		419
DK			31			1048	823	1901
EE			9	225	233			467
FI	1683	1245		297				3224
LT			50					50
LV			38		429			468
PL			548					548
RU			148	1531				1679
SE	811	1134	321			101	746	3114
OC	181	394	1046	150	93	105	118	2087
NEMUNAS			923					923
BARTA			15					15
VENTA			68					68
LIELUPE					274			274
DAUGAVA					991			991
ODER			1570					1570
VISTULA			2374					2374
PREGOLYA			148					148
NEVA				1398				1398
MAI	2675	2773	7360	3600	2020	1601	1687	21716

*Sources of atmospheric deposition of phosphorus cannot be allocated to countries.

Waterborne phosphorus input ceilings for HELCOM and non-HELCOM countries within transboundary river basins:

RIVER	NIC	DE	FI	LT	LV	PL	RU	BY	CZ	UA
NEMUNAS	923			634				289		
BARTA	15			5	10					
VENTA	68			16	52					
LIELUPE	274			214	60					
DAUGAVA	991			45	115		261	570		
ODER	1570	46				1410			114	
VISTULA	2374					2199		100		74
PREGOLYA	148					70	78			
NEVA	1398		19				1378			

RECOGNIZING that the input ceilings for nitrogen and phosphorus are based on current scientific knowledge and are subject to uncertainties and following the precautionary principle **WE COMMIT** [to not increase

nutrient input or to even] further implement nutrient reductions in basins where nutrient inputs are already below the nutrient ceilings.

WE AGREE to organize regular assessment [annual for MAI and every 2 years for input ceilings] to follow up implementation of regional and national targets for inputs of nutrients based on the most recent monitoring data of riverine nutrient loads, the data on air deposition of nutrients, transboundary loads and national data on inputs from direct point sources including sea-based aquaculture. **WE COMMIT** to maintain up-to-date national monitoring networks and regionally harmonized models of input from unmonitored areas and to provide timely sufficient and consistent data on nutrient loads to the Baltic Sea (HELCOM Recommendations 37-38/1 and 37-38/2) in order to ensure reliability of the follow-up system.

RECOGNIZING that reductions in nutrient inputs in sub-basins may have wide-spread effects, **WE AGREE** that extra reduction – reduction of nutrient input below national input ceiling for a sub-basin - can be accounted for, in proportion to the effect on a neighbouring basin, by the countries in reaching their nutrient input ceilings. The reallocation of the extra reduction to the neighbouring basins is to be based on the following principles:

1. Accounting should be based on countries individually.
2. Countries could claim accounting for missing reductions to reach national input ceilings, even in cases when MAI is exceeded due to inputs from other countries.
3. Any relocation of measures should lead to at least the same environmental improvement as if the reduction needed to reach national nutrient input ceilings were implemented.
4. The effect of extra reductions on neighbouring basins with missing reductions should be estimated given that these are minor deviations from maximum allowable inputs.
5. Accounting for extra reductions in the HELCOM nutrient input reduction scheme follow-up assessments are to be performed in a uniform way using methodology harmonized across the region and based on the best available scientific knowledge.
6. The Archipelago Sea phosphorus input reductions should be accounted in the reduction needs of Finland for the Gulf of Finland.
7. In the context of extra reduction accounting, reductions of phosphorus to Baltic Proper could be accounted as input reduction to the Gulf of Finland.
8. Following the precautionary principle, re-allocation of extra reductions cannot be used to purposely increase inputs to a neighbouring basin.

RECOGNIZING that input from catchment is of utmost importance **WE COMMIT** to further enhance cooperation with River Basin Management Authorities to align nutrient reduction requirements for individual river basins and environmental targets set by the HELCOM Baltic Sea Action Plan and, thus, assure sufficiency of measures undertaken under different policy to achieving the environmental targets of the BSAP. **WE ALSO ENCOURAGE** contracting parties to the Helsinki Convention to enhance cooperation with river basin management authorities of non-HELCOM countries to institutionalize cooperation on river basin management through signing official agreement with relevant authorities, to establish regular exchange of information on transboundary loads and to coordinate measures aimed at reduction of nutrient loads.

Annex 1.

Comments by PRESSURE 11-2019 on the proposed text of the updated HELCOM nutrient input reduction scheme

General comments:

- to account for the anticipated increase of ship traffic and the direct emissions to water from ship scrubbers when updating the estimate of the anticipated reduction from shipping due to the implementation of the NECA;
- to reflect information on the achieved progress to reduce nutrient input;*
- update the last paragraph of the text in line with the proposal of the WS with RBMA;*
- include years for updating NIC assessment

*comments have been integrated to the current version of the document.

Proposals by countries:

Germany proposed the target year 2027 as the latest to take all possible actions in line with WFD.

Finland was of the opinion that the consideration of the proposed text is to be further continued together with the update of the other parts of the BSAP.

PRESSURE 11-2019 discussed the statement in the proposed text regarding not increasing input after achieving input ceilings based on the precautionary principles and took note of the position of Germany that the statement is important and should remain in the document.