



Document title	Review of the BSAP structure and HELCOM objectives
Code	4-3 Rev.1
Category	CMNT
Agenda Item	4- Implementation and update of the HELCOM Baltic Sea Action Plan
Submission date	30.10.2019
Submitted by	Secretariat
Reference	

The document has been revised to reflect the outcome of State and Conservation 11-2019, Pressure 11-2019 and HELCOM VASAB MSP 19-2019. Added text is indicated in red. Background information on how the HELCOM Groups have arrived at the current proposals has also been added (Annex 2).

Background

According to the strategic plan for the update of the BSAP and the decision by HOD 55-2018, Working Groups have initiated a review of the existing HELCOM ecological and management objectives and the development of new objectives for marine litter, underwater noise, and loss and disturbance to the seabed. Concomitantly HOD have reviewed the overarching 'BSAP structure', including its segments and goals, and agreed on a provisional structure to be used as a basis for the update of the BSAP and ongoing work by the Working Groups (para 2.23, Outcome HOD 56-2019).

The review of existing objectives and the development of new ones is taking place through an iterate process where the review has been initiated by one Working Group, while other Groups have had the possibility to comment the proposals of relevance for the mandate of their work.

This document includes information on the proposed update of the 'BSAP structure' (section 1) as of HOD 56-2019 and a summary of the most up to date proposals on objectives by Working Groups (Annex 1 and 2). The aim is to finalize an updated set of objectives so that HOD 57-2019 can agree upon them.

Action requested

The Meeting is invited to:

- take note of the provisional agreement to adjust the BSAP structure,
- consider the proposals on ecological and management objectives by HELCOM Working Group, propose adjustments as seen relevant to harmonize terminology of objectives across segments, and make a recommendation to Heads of Delegation, noting the aim to endorse the objectives at HOD 57-2019,
- consider the proposal that the goal for biodiversity could be presented as an overarching goal in the BSAP to which the implementation of the segments on eutrophication, hazardous substances and litter, and sea-based activities will contribute.

1) Background to the adjustment of the Baltic Sea Action Plan

1.1 Adjustment to the BSAP structure

As part of the BSAP update process, HOD 55-2018 requested HELCOM Working Groups to initiate the development of ecological objectives for the topics marine litter, underwater noise, and loss and disturbance of the seabed and to review existing HELCOM objectives based on guidance given by the GEAR Group. Management objectives, which currently only exists for the BSAP segment on maritime activities, should be developed for all segments of the updated BSAP. HOD 56-2019 furthermore agreed to use ecological objectives, management objectives and actions to organize the segments of the updated BSAP document (Outcome, para 2.23). The association between the three components is illustrated in Figure 1.

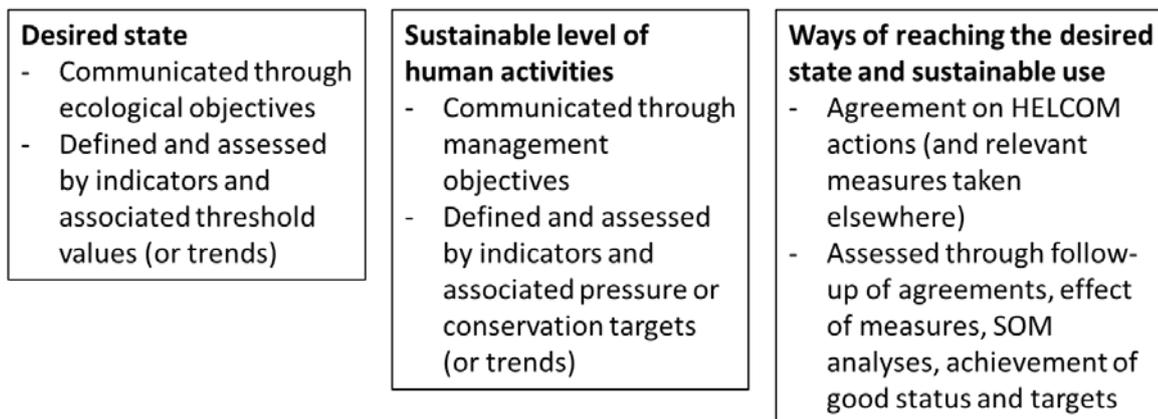


Figure 1. Link and purpose of HELCOM ecological objectives, management objectives and actions.

Once the revised and updated objectives have been agreed upon the continued development of the updated BSAP will be organized according to this framework.

HOD 56-2019 also supported an adjustment to the BSAP structure to better reflect the topics that are currently addressed in HELCOM. The structure follows closely the existing BSAP, maintaining four segments, with the following adjustments (Figure 2):

- to address litter primarily under the segment on hazardous substances and to consider changing the segment and associated goal to 'Baltic Sea undisturbed by hazardous substances and litter'.
- to include under the maritime segment a broader set of sea-based activities and consider changing the name of the segment and associated strategic goal to 'Environmentally friendly sea-based activities'. The new topics underwater noise and loss and disturbance of the seabed are primarily assigned to this segment. The segment on 'Sea-based activities' includes the type of activities that are considered in Maritime Spatial Planning which could have prominent place in such segment.
- the goal on Eutrophication remains as present while the associated activities and actions may be adjusted as relevant.
- the segments on Eutrophication and Hazardous substances and litter will, as in the current BSAP, primarily focus on pressures from land-based activities.

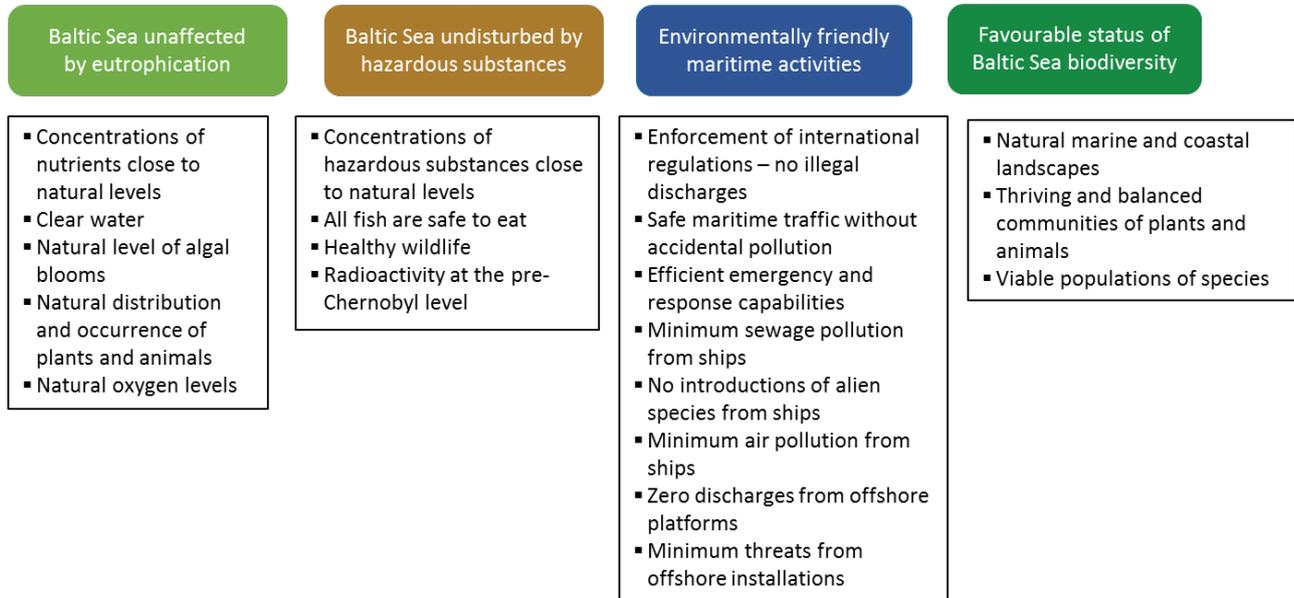
Maritime 19-2019 furthermore proposed to change the goal of the sea-based segment by exchanging the word 'friendly' with 'sustainable'. **State and Conservation 11-2019 proposed to change the goal of the biodiversity segment to "Baltic Sea ecosystems are healthy and resilient"**. These proposals will be presented for consideration by HOD 57-2019.

It should be noted that the 'BSAP structure' is not directly linked to the HELCOM Working Group structure and that several Working Groups will be involved in the future implementation of actions under each segment in the updated BSAP.

VISION (HOD 55-2018 agreed that the Vision of the current BSAP will be maintained):

A healthy Baltic Sea environment, with diverse biological components functioning in balance, resulting in good environmental/ecological status and supporting a wide range of sustainable human economic and social activities

SEGMENTS, GOALS and OBJECTIVES (original):



SEGMENT and GOALS (as HOD 56-2019):



Figure 2. The upper part of the figure shows the current HELCOM system with a vision, strategic goals, ecological objectives (eutrophication, hazardous substances, biodiversity) or management objectives (maritime activities). All existing objectives are to be reviewed by HELCOM Working Groups and new objectives are to be developed for marine litter, loss and disturbance to the seabed, and underwater noise. The lower part of the figure shows adjustments to the overarching goals as of HOD 56-2019.

1.2 Process for review of existing objectives and development of new objectives

The review of existing objectives and development of new objectives has been carried out through an iterative process where one Working Group has initiated the review, while other Groups will have the possibility to comment the proposals of relevance for the mandate of their work. The aim is to present proposals for endorsement by HOD in December 2019. The following meetings have addressed the objectives so far:

- Pressure 10-2019
- State & Conservation 10-2019
- Fish 10-2019
- Response 26-2019
- Maritime 19-2019
- **State and Conservation 11-2019**

- [Pressure 11-2019](#)
- [HELCOM-VASAB MSP 19-2019](#)

The outcome of the discussions at these meetings is presented in Working Papers ([Pressure 10-2019, DS WP.1, State&Conservation 10-2019, 8J, WP.1 – Attachment 1](#)) or as part of the main outcome of the meetings ([Outcome Fish 10-2019 para 3.22, Response 26-2019 para 3.10, Maritime 19-2019](#)). Outcome of State and Conservation 11-2019, Pressure 11-2019 and HELCOM VASAB-MSP 19-2019 were not finalized when this document was prepared but can be retrieved via the [HELCOM Meeting portal](#).

[Annex 2](#) includes a summary of the discussions that have led up to the proposed objectives as presented in this document. For in depth information see the outcome of the respective meeting.

1.3 Guidance given for the review and revision of HELCOM objectives

The guidance given for the review and revision of HELCOM objectives is based on the outcome of GEAR 19-2018, GEAR 20-2019, and further elaborations by the Chairs of Pressure, State and Conservation and the Secretariat.

General guidance

The objectives should be:

- linked to HELCOM assessments i.e. achievement should be possible to follow-up through HELCOM assessments,
- easy to communicate to the wider community,
- not too many. Recall that the BSAP structure is meant to reflect overall aim and objectives of HELCOM work to the wider community, but not to list every issue dealt with.
- with regard to the review of existing objectives the following should also be considered:
 - o are objectives missing with respect to new developments in HELCOM since the current BSAP was adopted?
 - o are the objectives up to date (e.g. are the terms used up to date)?
- the terminology of objectives between segments should be harmonized.

Ecological objectives

- should reflect the desired state of the environment and be of aspirational character,
- should be possible to follow-up by use of indicators and associated threshold values,
- with regard to new topics (marine litter, underwater noise, loss and disturbance to seabed) the ecological objectives should focus on the state elements of these topics or on their impacts on the environment e.g. on the concentration, amounts or extent of litter/noise/disturbance to seabeds, or properties of the ecosystem that should be maintained or not harmed.

Management objectives

- management objectives describe the desired effect of or aspirational targets of management measures, (see e.g. management objectives for existing segment on maritime activities)
- follow-up of management objectives should in principle be done using indicators and associated pressure targets or in the case of biodiversity by targets for conservation and protection.

GEAR 20-2019 also made the following reflections on the proposals for objectives presented to that meeting:

- the proposed objectives for biodiversity are being developed in the right direction however should consider the difference between habitats, communities and population since there are now overlaps between the proposed objectives;
- for the proposed objective on 'Ecosystem function and development'; consider using the word succession instead of development; [\[note that this objective has since been revised and the comment is thus non longer relevant\]](#)

- when further elaborating on the objectives it should be recalled that they should be easy to communicate;
- align the development of ecological objectives with other ongoing HELCOM work, e.g. development of indicators;
- harmonize the terminology between objectives of different segments;
- with regard to management objectives for litter that refers to products etc., remove the word “marine” since the litter is not marine until it enters the sea;
- the term ‘Wild-life’ as proposed in relation to hazardous substances, litter and noise; consider a term that also embraces biodiversity more generally; [see section 1.4 for follow-up on this comment]
- with regard to noise, consider limiting the objective to underwater noise;
- clarify the link to MSFD descriptors, noting that this can take place at a later stage when the objectives are more developed;
- take note of and check against objectives that are currently developed by OSPAR. [note that this comparison has not been possible due late access to relevant documents]

These reflections have been brought forward to Working Group Meetings as relevant.

1.4 A reflection on harmonization of objectives between segments

This section provides a reflection of the degree of revisions proposed by the Working Groups and the level of harmonization with regard use of terminology between segments. For an overview of the objectives across segments see Annex 1.

Ecological objectives

Regarding the level of revision, for the existing ecological objectives for eutrophication and hazardous substances the Pressure and State and Conservation Workings Groups have proposed only minor revisions since they are considered as still relevant and because it is found valuable to keep BSAP objectives that have become well-known to the wider community.

For the biodiversity segment the State and Conservation Working Group has proposed more substantial changes to increase the relevance of the objectives. These revisions are found necessary to ensure that the objectives cover the range from species to ecosystem and that the objectives reflect the current HELCOM indicator system as far as possible.

The use of terms of the proposed objectives is fairly well aligned across segments for example referring to ‘natural’ conditions or ‘concentrations’ in three of the segments, and using use of the term ‘wild-life’ in two of them. The length of the objectives however vary considerably; from 2-25 words. **With regard to the proposal by GEAR to replace the term wild-life the issues was first discussed by State and Conservation 11-2019 that proposed to consider either “Baltic Sea biodiversity” or “Baltic Sea life”. Pressure 11-2019 that took place later during the same work proposed to simply use the term “sea life” since the Group was of view that the aim of the objectives that currently use the term wild-life is to protect species, not diversity. It was furthermore not felt necessary to repeat “Baltic” in the objectives. The proposal to use “sea life” has been implemented throughout the objectives as presented in this document.**

The number of objectives associated to the segments and goals differs which is also the case in the current BSAP. With regard to the ecological objectives they now vary between 2-5. The lowest number of objectives is linked to the segment on sea-based activities where ecological objectives related to underwater noise and loss and disturbance to the seabed are proposed to be placed according to HOD 56-2019. Many of the ecological objectives for other segments are also relevant for sea-based activities and instead of repeating them, cross-referencing will be used e.g. by clarifying that the objectives under the sea-based segment need to be achieved to reach a Baltic Sea unaffected by eutrophication.

Management objectives/Conservation objectives

Management objectives in the BSAP currently only exists for maritime activities. With regard to these objectives Maritime 19-2019 proposed minor revisions to four of the objectives (see section 2.4.3). The previous objective related to input of sewage was revised and is now using the wordings eutrophication and 'operational pollution', thereby increasing the consistency with other segments regarding use of terms.

Pressure 11-2019 proposed to formulate one or a few overarching management objectives and not to refer to specific activities. Based on this agreement the management objectives for eutrophication, hazardous substance and litter, noise and loss and disturbance to the seabed habitats were revised and now follow a coherent approach. As a result, the segment on sea-based activities now contain overarching management objectives related to loss and disturbance to seabed habitats and underwater noise without reference to specific activities. Maritime 19-2019, which took place before Pressure 11-2019, was requested to review the existing objectives under the current Maritime segment and only proposed minor revisions. This means objectives related to maritime activities in some cases specifically refers to shipping and offshore activities as in the current BSAP.

The terms used are fairly well aligned between segments but further tweaking of words could take place when considered by all relevant Working Groups. The conservation objectives for the biodiversity segment are inherently different from the other segments.

Compared with management objectives for eutrophication the objectives for hazardous substances and litter deviates somewhat in that some of them are directed towards e.g. substitution and production. This difference between management objectives can be justified due to the fact that hazardous substance and litter are, in most cases, man-made products.

Annex 1. Current proposals aligned by ecological objectives and management objectives.

Table A1.1 Latest proposal on objectives to be considered by GEAR 21-2019, submitted 29 October.

Goals	Baltic Sea unaffected by eutrophication	Baltic Sea undisturbed by hazardous substances and litter	Environmentally sustainable ¹ sea-based activities	Baltic Sea ecosystems are healthy and resilient ²
Ecological objectives	<ul style="list-style-type: none"> - Concentrations of nutrients close to natural levels - Clear waters - Natural level of algal blooms - Natural distribution and occurrence of plants and animals - Natural oxygen levels 	<p>Hazardous substances:</p> <ul style="list-style-type: none"> - Concentrations of hazardous substances close to natural levels - All seafood safe to eat - Healthy sea life and food webs - Minimal risk to humans and environment from radioactivity <p>Litter:</p> <ul style="list-style-type: none"> - No harm to sea life from marine litter 	<p>Loss and disturbance:</p> <ul style="list-style-type: none"> - Activities affecting seabed habitats do not threaten the viability of species and communities <p>Noise:</p> <ul style="list-style-type: none"> - No harm to sea life from manmade noise 	<ul style="list-style-type: none"> - Viable populations of all native species - Natural distribution, occurrence and quality of habitats and associated communities - Functional, healthy and resilient food webs
Management/conservation objectives	<ul style="list-style-type: none"> - Minimize input of nutrients from human activities 	<p>Hazardous substances:</p> <ul style="list-style-type: none"> - Minimize input and impact of hazardous substances from human activities by elimination, substitution, and source management <p>Litter:</p> <ul style="list-style-type: none"> - Products are designed, produced, used and reused, recycled and disposed by applying principles of circular economy to prevent marine litter - Amounts of litter are significantly reduced on shorelines and in the sea, - Prevent input of litter 	<p>Loss and disturbance:</p> <ul style="list-style-type: none"> - Reduce, prevent and mitigate pressures and impacts from activities that are causing loss and disturbance to seabed habitats <p>Noise:</p> <ul style="list-style-type: none"> - Ensure noise levels support good conservation status, do not adversely affect stocks of noise sensitive species and do not injure or significantly disturb sea life <p>MSP:</p> <ul style="list-style-type: none"> - Maritime Spatial Planning applying an ecosystem- based approach throughout the Baltic Sea <p>Maritime activities:</p> <ul style="list-style-type: none"> - Enforcement of international regulations – no illegal discharges - Safe maritime traffic without accidental pollution - Effective emergency and response capabilities - Minimize the contribution to eutrophication and operational pollution from ships - No introductions of non-indigenous species from ships- - Minimum harmful air emissions from ships - Zero discharges from offshore platforms - [Minimum threats from offshore installations]³ 	<ul style="list-style-type: none"> - An effectively managed and ecologically coherent network of marine protected areas - Minimized disturbance of species, their habitats and migration routes by human activities - Human induced mortality including hunting, fishing, and incidental bycatch does not threaten the viability of Baltic sea life - Effective and coordinated conservation plans and measures for threatened species, habitats, biotopes, and biotope complexes <p>*objective for food webs under development</p>

¹ proposed revision by Maritime 10-2019 (the original segment uses the term 'friendly' instead of 'sustainable')

² new proposal by State and Conservation 11-2019 (the original segment reads "Favourable status of Baltic biodiversity")

³ see reflection by Maritime 19-2019, section 2.3.3

Table A1.2 Proposal on objectives as originally submitted to GEAR 21-2019 on 16 October for comparison.

Goals	Baltic Sea unaffected by eutrophication	Baltic Sea undisturbed by hazardous substances and litter	Environmentally sustainable ⁴ sea-based activities	Status of biodiversity which ensures resilience and ecological integrity ⁵
Ecological objectives	<ul style="list-style-type: none"> - Concentrations of nutrients close to natural levels - [Clear water⁶] - Natural level of algal blooms - Natural distribution and occurrence of plants and animals - Natural oxygen levels 	<p>Hazardous substances:</p> <ul style="list-style-type: none"> - Concentrations of hazardous substances close to natural levels - All seafood safe to eat - Healthy wildlife and food webs - Radioactivity at negligible risk level to humans and environment <p>Litter:</p> <ul style="list-style-type: none"> - Wild-life safeguarded from marine litter, OR - No harm to wildlife from marine litter 	<p>Loss and disturbance:</p> <ul style="list-style-type: none"> - Healthy seabed habitats OR - Maintaining natural seabed conditions OR - Undisturbed seabed from human activities OR - Size and distribution of habitats are within limits which secure long term variability for associated communities and ecosystem services <p>Noise:</p> <ul style="list-style-type: none"> - No harm to wildlife from anthropogenic noise, OR - Introduction of sound does not harm wildlife 	<ul style="list-style-type: none"> - Viable populations of all species - Natural distribution, occurrence and quality of habitats and associated communities - Functional and resilient food webs
Management/conservation objectives	<ul style="list-style-type: none"> - Minimize input of nutrients from human activities OR, - Minimize input of nutrients from agriculture and... 	<p>Hazardous substances:</p> <ul style="list-style-type: none"> - Replacement of hazardous substance by more environmental friendly alternatives, AND - Minimize input of hazardous substances OR - Minimize input of hazardous substances from industry, households, agriculture ...– <p>Litter:</p> <ul style="list-style-type: none"> - Minimize input of litter from ... , - Products are designed, produced, used and reused, recycled and disposed to minimize marine litter, - Amounts of litter are significantly reduced on beaches and in the sea 	<p>Loss and disturbance:</p> <ul style="list-style-type: none"> - Sustainable practices of activities that causing loss and disturbance to the seabed, OR <ul style="list-style-type: none"> o Sustainable fishery practices, AND o Sustainable practices for extraction of oil, gas and minerals, AND o Ecosystem-based planning of marine infrastructure, AND o Best practices for dredging and of depositing of dredged material <p>Noise:</p> <ul style="list-style-type: none"> - No proposals <p>Maritime activities:</p> <ul style="list-style-type: none"> - Enforcement of international regulations – no illegal discharges - Safe maritime traffic without accidental pollution - Effective emergency and response capabilities - Minimize the contribution to eutrophication and operational pollution from ships - No introductions of non-indigenous species from ships- - Minimum harmful air emissions from ships - Zero discharges from offshore platforms - [Minimum threats from offshore installations]⁷ 	<ul style="list-style-type: none"> - An effectively managed, ecological coherent and representative network of marine protected areas - Ecosystem-based planning of ecologically important areas outside MPAs - Minimized disturbance of species by human activities, including access to migration routes - Human induced mortality of species at sustainable level - Effective and regional coordinated conservation plans and measures for threatened species and habitats - The food web is balanced in species composition and total abundance - The food web is assessed holistically as an interconnected system"

⁴ proposed revision by Maritime 10-2019 (the original segment uses the term 'friendly' instead of 'sustainable')

⁵ new proposal to be discussed by State and Conservation 11-2019 (the original segment read "Favourable status of Baltic biodiversity")

⁶ under discussion

Annex 2 Consolidated lists of proposed objectives

This part of the document includes first a consolidated summary box of proposed objectives followed by a reflection on the discussions that have taken place to come up with the proposals.

2.1 Eutrophication

Ecological objectives

As of Pressure 11-2019 the consolidated list of ecological objectives for the strategic goal 'Baltic Sea unaffected by eutrophication' is:

- **Concentrations of nutrients close to natural levels**
- **Clear water**
- **Natural level of algal blooms**
- **Natural distribution and occurrence of plants and animals**
- **Natural oxygen levels**

Management objectives

As of Pressure 11-2019 the proposed management objective is:

- **Minimize input of nutrients from human activities**

Ecological objectives

The work has focused on the review of existing ecological objectives. In general the conclusion has been that:

- Eutrophication state variables are well covered by the objectives – no need for new objectives
- Keep them mainly as they are; it is valuable to keep well known objectives.

No revisions to the ecological objectives have been made.

Management objectives

One of the primary discussions have been whether there should be one more overarching objective related to input of nutrients or several objectives that are linked to specific sectors e.g. agriculture, waste water treatment, aquaculture. Pressure 11-2019 was of the view to only formulate one more overarching objective as expressed in the summary box.

2.2 Hazardous substances and litter

Ecological objectives

As of Pressure 11-2019 the consolidated list of ecological objectives for the strategic goal: 'Baltic Sea undisturbed by hazardous substances and litter' is:

Hazardous substances:

- **Concentrations of hazardous substances close to natural levels**
- **All seafood safe to eat**
- **Healthy sea life and food webs**
- **Minimal risk to humans and environment from radioactivity**

Litter:

- **No harm to sea life from marine litter**

Management objectives

As of Pressure 11-2019 the proposed management objectives are:

Hazardous substances:

- **Minimize input and impact of hazardous substances from human activities by elimination, substitution, and source management**

Litter:

- **Products are designed, produced, used and reused, recycled and disposed by applying principles of circular economy to prevent marine litter**
- **Amounts of litter are significantly reduced on shorelines and in the sea,**
- **Prevent input of litter**

Ecological objectives

The work has focused on the review of existing ecological objectives for hazardous substances and development of new ecological objectives for marine litter. General conclusion has been to

- Keep the existing objectives on hazardous substances mainly as they are. Valuable to keep well known objectives.

Pressure 10-2019 proposed to consider the development of a new objective for pharmaceuticals but this was not supported by State and Conservation 10-2019 as pharmaceuticals are considered as covered by the general ecological objective on concentrations of hazardous substances.

Revisions compared with existing objectives include:

- to revise the ecological objective 'All fish safe to eat' to 'All seafood safe to eat' linking the objective clearly to human consumption.
- to revise objective on 'Healthy wildlife' to 'Healthy wildlife and food webs' to cover potential effects of bio-accumulation in the environment

HELCOM Expert Group MORS was invited to review the objective related to radioactivity and MORS EG 9-2019 and was of the view that reference to pre-Chernobyl in the existing objective is backward-looking and made a proposal according to the following which is also reflected in the summary box:

- to revise the ecological objective 'Radioactivity at pre-Chernobyl level' to 'Radioactivity at negligible risk level to humans and environment'

This proposal was further amended by Pressure 11-2019 with the view to harmonize and simplify the objective so that it reads 'Minimal risk to humans and environment from radioactivity' as reflected in the summary box.

With regard to litter, based on Pressure 10-2019 and amended by State&Conservation 10-2019, the following proposals have been considered:

- 'Wild-life safeguarded from marine litter', OR 'No harm to wildlife from marine litter'

Pressure 11-2019 proposed to use the second alternative while exchanging wildlife with sea life as reflected in the summary box.

It can be noted that at Maritime 19-2019 Sweden proposed not to include any ecological objective related to marine litter with the argument that litter should not be present in the marine environment.

Management objectives

As for Eutrophication one of the primary discussions have been whether there should be one or a few more overarching objectives related to the input of hazardous substances and litter or several objectives that are linked to specific sectors. As of Pressure 11-2019 it was agreed to only have one overarching objective for hazardous substances as indicted in the box above. For litter it was found useful to still distinguish between production that may result in litter, input of litter, and litter at sea.

It can also be mentioned that some early proposals on objectives were not further considered since they are considered as unrealistic (zero target), related to risk assessment procedures (screening of emerging substances) or formulated as actions.

2.3 Sea-based activities

The segment on sea-based activities will focus on management objectives while also including ecological objectives for loss and disturbance to the seabed and underwater noise according to the provision structure of the updated BSAP. For other pressures stemming from sea-based activities (eutrophication, hazardous substances, litter, disturbance to species), cross-reference will be made to ecological objectives under other segments.

2.3.1 Loss and disturbance to seabed habitats

Ecological objectives

As of State and Conservation 11-2019 (and slightly amended by Pressure 11-2019) the proposed ecological objective for loss and disturbance to seabed habitats is:

- **Activities affecting seabed habitats do not threaten the viability of species and communities**

Management objectives

As of State and Conservation 11-2019 (and slightly amended by Pressure 11-2019) the proposed management objective for loss and disturbance to seabed habitats is:

- **Reduce, prevent and mitigate pressures and impacts from activities that are causing loss and disturbance to seabed habitats**

Ecological objectives

A number of alternative ecological objectives for this new topic has been brought forward a Pressure 10-2019 and Fish 10-2019. The proposal indicated in the box above was proposed by State and Conservation 11-2019 and supported by Pressure 11-2019 with minor adjustment to the wording.

Management objectives

Also for management objectives a number of different alternatives have been suggested Pressure 10-2019 and Fish 10-2019, including proposals to link objective to specific activities that are causing loss and

disturbance to seabed habitats, but also for this topic it was in the end agreed to have one only overarching objective. The proposal indicated in the summary box was proposed by State and Conservation 11-2019 and supported by Pressure 11-2019 with minor adjustment to the wording.

2.3.2 Underwater noise

Ecological objectives

As of on Pressure 11-2019 the following is proposed:

- **No harm to sea life from manmade noise**

Management objectives

As of Pressure 11-2019 the following is proposed:

- **Ensure noise levels support good conservation status, do not adversely affect stocks of noise sensitive species and do not injure or significantly disturb sea life**

Ecological objectives

Different alternatives have been discussed including 'No harm to wildlife from anthropogenic noise', and 'Introduction of sound does not harm wildlife'. The formulation as included in the summary box was supported by Pressure 11-2019. Several other alternatives have been considered not been further developed since they are considered as unrealistic or formulated as actions rather than objectives.

Management objectives

Pressure 10-2019 proposed a set of management objectives for underwater noise but they were not been further elaborated, mainly because they were formulated as actions rather than objectives. The objective agreed by Pressure 11-2019, included in box above, builds in proposals prepared by German representative of EN Noise⁸. It can be noted that previous guidance to the development of objectives on noise has been to develop separate objectives for continuous and impulsive noise.

2.3.3 Maritime activities

Based on Maritime 19-2019, the goal of the segment was proposed to be revised to read:
Environmentally **sustainable** sea-based activities

Management objectives

Proposed management objectives related to maritime activities, based on the outcome of Maritime 19-2019, are.

- **Enforcement of international regulations – no illegal discharges**
- **Safe maritime traffic without accidental pollution**
- **Effective emergency and response capabilities**
- **Minimize the contribution to eutrophication and operational pollution from ships**
- **No introductions of non-indigenous species from ships**
- **Minimum harmful air emissions from ships**
- **Zero discharges from offshore platforms**
- **[Minimum threats from offshore installations]**

Management objectives

Maritime 19-2019 discussed the existing management objectives for the current maritime segment. These objectives will be associated to the revised goal related to sea-based activities, and thus, they will be presented together with the proposed ecological and management objectives of underwater noise and loss

⁸ EN Noise was invited to provide suggestions on HELCOM objectives at the their online meeting held 19 August 2019

and disturbance to the seabed. The Meeting agreed on the following revisions as already reflected in the summary box:

- replace the term alien species with non-indigenous species.
- replace the term air pollution with harmful air emissions
- revise 'Efficient emergency and response capabilities' to be 'Effective emergency and...'
- revise the objective 'Minimum sewage pollution from ships' so that it reads 'Minimize contribution to eutrophication and operational pollution from ships'

The Meeting discussed the management objective on threats from offshore installations and noted that it relates e.g. to that installations such as underwater cables, pipelines and offshore wind farms put increasing pressure on the Baltic Sea ecosystem. The Meeting further noted the relevance of maritime spatial planning in this respect and also that objectives related to loss and disturbance of the seabed may reflect this particular angle of offshore installations.

The Meeting furthermore proposed to replace the word 'friendly' with 'sustainable' in the goal of the segment on sea-based activities.

It should be noted that discussions by Maritime was focused the review of existing objectives and took place before Pressure 11-2019 proposed to formulate more overarching management objectives.

2.3.4. Non-indigenous species

There are no proposals on ecological objectives for non-indigenous species at this time. The Secretariat proposes that no such objectives should be developed since the presence of non-indigenous species is not possible to formulate in terms of desired state.

The current Baltic Sea Action Plan includes one management objective that with the proposed revision by Maritime 19-2019 reads: 'No introduction of non-indigenous species from ships' Pressure 11-2019 proposed that this objectives should simply read 'No introduction of non-indigenous species' to also cover e.g. input for NIS from sea-based aquaculture.

2.3.5 Maritime spatial planning

There is no objective related to maritime spatial planning in the current BSAP. State and Conservation 11-2019 proposed the management objective 'Ecosystem-based planning throughout the Baltic Sea' noting the proposal that it should be addressed under the segment on sea-based activities. HELCOM-VASAB MSP 19-2019 was invited to consider this objective and proposed to revise it so that it read 'Maritime Spatial Planning applying an ecosystem-based approach throughout the Baltic Sea' to clarify the link to MSP and the ecosystem-based approach as its agreed basis in HELCOM. The proposed objective is currently associated to the segment on sea-based activities (Annex 1).

2.4 Biodiversity

Goal

State and Conservation 11-2019 proposed to revise the goal of the biodiversity from 'Favourable status of Baltic Sea biodiversity' to: **Baltic Sea ecosystems are healthy and resilient**

Note that the revised goal could be considered as an overarching goal to which the implementation of the segments on eutrophication, hazardous substances and litter, and sea-based activities will contribute.

Ecological objectives

As of State and Conservation 11-2019 the following is proposed:

- Viable populations of all native species
- Natural distribution, occurrence and quality of habitats and associated communities
- Functional, healthy and resilient food webs

Management and conservation objectives

As of State and Conservation 11-2019 the following is proposed:

- An effectively managed and ecologically coherent network of marine protected areas
- Minimized disturbance of species, their habitats and migration routes by human activities
- Human induced mortality including hunting, fishing, and incidental bycatch does not threaten the viability of Baltic sea life
- Effective and coordinated conservation plans and measures for threatened species, habitats, biotopes, and biotope complexes

*management objective for food webs under development

Goal for biodiversity

The goal for biodiversity is proposed to be revised based on the following reasoning:

- the goal for biodiversity should reflect the complexity of the ecosystem and refer to maintaining ecosystem function and essential ecosystem services.
- the goal should avoid phrases which might leave room for interpretation or could be seen as a reference to European directives. Favorable could be understood as a reference to habitats directive, the more general goal as it is proposed links it more easily to goals on a global (e.g. SDG:s), regional (e.g. Oskar) and European scale (directives).

First, a longer more comprehensive goal was developed reading "Status of biodiversity which ensures the natural structure, function and development of the ecosystem, safeguarding its resilience and ecological integrity." This wording was shortened as indicated in the summary box to better align the biodiversity goals with the goals of other segments.

The proposed new goal reflects the complexity of the Baltic Sea ecosystem better and links better to the ecological objectives. With the revision of the goal it is possible to define the ecological objectives in more detail and link these more clearly to relevant actions and indicators.

A glossary has been developed with regard to the terms used in the revised goal and objectives (see Annex 3).

Ecological objectives

The revised goal reflects the different levels within the ecosystem (species, communities/habitats/biotopes, and food webs), which in combination with the associated indicators can form the basis for an assessment of achievement of the goal for biodiversity. It is nearly impossible to reflect the complexity of ecosystems by short phrases, so the objectives must be seen as frames for indicators or assessments, which have to be integrated towards the biodiversity goal.

Conservation objectives

The development on conservation objectives have focused on the main areas of HELCOM work with regard to biodiversity; marine protected areas, protection of biodiversity through planning and conservation activities, and through the management of human activities. The latter is also the focus of management objectives under other segments but complemented here with an objective directly focusing on the extraction of species.

Note that State and Conservation 11-2019 proposed an objective on 'Ecosystem-based planning throughout the Baltic Sea'. This proposal was further amended by HELCOM-VASAB MSP 19-2019 so that it reads 'Maritime Spatial Planning applying an ecosystem-based approach throughout the Baltic Sea' and is associated to the segment on sea-based activities (see 2.3.5).

Annex 3. Glossary for biodiversity

Abundance (ecological):

The size of a population of a particular life form in a given area. (IPBES)

Biodiversity:

The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variation in genetic, phenotypic, phylogenetic, and functional attributes, as well as changes in abundance and distribution over time and space within and among species, biological communities and ecosystems. (IPBES, based on Diaz et al. 2015. "The IPBES Conceptual Framework — Connecting Nature and People." Current Opinion in Environmental Sustainability 14: 1–16. doi:10.1016/j.cosust.2014.11.002)

Community:

A group of actually or potentially interacting species living in the same location. Communities are bound together by a shared environment and a network of influence each species has on the other. (Nature)

Conservation:

The management of human use of nature so that it may yield the greatest sustainable benefit to current generations while maintaining its potential to meet the needs and aspirations of future generations. (CBD)

The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence. (IUCN)

Distribution:

The spatial occurrence of an ecosystem or species (IUCN).

Disturbance (event):

An event that causes a change in environmental conditions that interfere with ecosystem function. (IUCN)

Ecological coherence (of MPAs):

- *Interacts with and supports the wider environment;*
- *Maintains the processes, functions and structures of the intended protected features across their natural range;*
- *Functions synergistically as a whole, such that the individual protected sites benefit from each other in order to achieve the other two objectives.*

Additionally, an ecologically coherent network of MPA may:

- *Be designed to be resilient to changing conditions. (OSPAR 2006)*

Ecological integrity:

Maintaining the diversity and quality of ecosystems and enhancing their capacity to adapt to change and provide for the needs of future generations. (IUCN)

Eccosystem services: *The goods and services provided by healthy ecosystems, including medicinal plants, clean water and air, and protection from extreme natural events. (IUCN)*

Habitat:

The locality or environment in which an animal lives. (IUCN)

The place or type of site where an organism or population naturally occurs. Also used to mean the environmental attributes required by a particular species or its ecological niche. (IPBES, CBD)

Marine Protected Area (MPA):

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the longterm conservation of nature with associated ecosystem services and cultural values. MPAs can offer a spectrum of management strategies ranging from full protection, or no-entry areas, to multiple-use areas which prohibit limited activities. No-take MPAs are spatial closures that prohibit all forms of resource extraction, especially fishing. Limited take MPAs include those MPAs with mixed harvest or restricted harvest prohibition areas. (IUCN-WCPA 2008).

An area of sea (or coast) especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means. (CBD)

Natural:

Existing in or derived from nature; not made or caused by humankind (Oxford English Dictionary)

Occurrence:

the existence or presence of something (Cambridge English Dictionary)

area contained within the shortest continuous boundary which encompasses all known, inferred and projected sites of present occurrence of a taxon, excluding cases of vagrancy. This measure may exclude discontinuities or disjunctions within the overall distributions of taxa (e.g. large areas of obviously unsuitable habitat) (IUCN)

Quality (of habitats & biotopes):

the ability of the environment to provide conditions appropriate for individual and population persistence. (Hall et al. (1997:175))

Representative:

typical of, or the same as, others in a larger group of people or things (Cambridge English Dictionary)

Resilience:

The capacity of a system to recover from stress and disturbance while retaining its essential functions, structure, feedbacks and identity. Resilient ecosystems sustain biological diversity and human livelihoods in times of severe and wide-ranging change. (IUCN)

Ecosystem functioning and resilience depends on a dynamic relationship within species, among species and between species and their abiotic environment, as well as the physical and chemical interactions within the environment. The conservation and, where appropriate, restoration of these interactions and processes is of greater significance for the long-term maintenance of biological diversity than simply protection of species. (CBD)

The capacity of an ecosystem to return to the pre-condition state following a perturbation, including maintaining its essential characteristics taxonomic composition, structures, ecosystem functions, and process rates. (Holling 1973)

The level of disturbance that an ecosystem or society can undergo without crossing a threshold to a situation with different structure or outputs. Resilience depends on factors such as ecological dynamics as well as the organizational and institutional capacity to understand, manage, and respond to these dynamics. (IPBES)

Threatened habitat:

Area assigned on the basis of quantitative thresholds to one of the three following IUCN categories for ecosystem assessment: Critically Endangered (CR), Endangered (EN), and Vulnerable (VU). (IUCN)

Threatened species:

Any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. (IUCN, CBD)

In the IUCN Red List terminology, a threatened species is any species listed in the Red List categories Critically Endangered, Endangered, or Vulnerable. See <https://portals.iucn.org/library/efiles/documents/RL-2001-001-2nd.pdf> (IPBES)

Viable population:

A population large enough for long-term survival. (IUCN).