



Document title	Review of synopses on potential new actions for the updated BSAP
Code	3-6 Add.2
Category	CMNT
Agenda Item	3 – Implementation and update of the Baltic Sea Action Plan
Submission date	3.3.2019
Submitted by	Secretariat

Background

In addition to the synopses on potential new measures and actions for the updated Baltic Sea Action Plan set out in documents 3-6 and 3-6 Add.1, five new actions with relevance for the Fish Group have been submitted by the HELCOM ACTION Project. More information can be found attached to this document.

Action requested

The Meeting is invited to consider the information and undertake a technical review of the synopses based on the common guidance.

Five new actions with relevance to the Fish Group, submitted by the HELCOM ACTION project

<p>Title</p> <p>Removal of unnecessary dams and migration barriers, especially in small waterways</p>
<p>Submitted by: ACTION Project and associated HELCOM ACTION WP2.2 workshop</p> <div style="display: flex; align-items: center; gap: 10px;">   </div>
<p>Description of measure</p> <p>Dams and barriers in small waterways prevent natural flows and processes, and can interfere with migratory fish. Removing unnecessary obstructions, particularly in small waterways, should provide better habitat formation and has the potential to improve water quality in coastal areas. Such improvements would contribute to green infrastructure benefits such as the potential for fish nurseries and wetland areas to form.</p>
<p>Activity: Canalisation and other watercourse modifications (coastal dams, culverting, trenching, weirs, large-scale water deviation) Multiple ofther activities also relevant</p>
<p>Pressure: <i>Disturbance of species: Other (e.g. barriers, collission)</i></p>
<p>State: Seabed habitats Pelagic habitats Multiple state components also relevant.</p>
<p>Extent of impact: Local in most direct sense but with broader regional importance due to potential impacts.</p>
<p>Effectiveness of measure</p>
<p>Cost, cost-effectiveness of measure:</p>
<p>Feasibility:</p>
<p>Follow-up of measure: The overall impacts could be encapsulated with existing (under development) assessments, though focussed assessment may also be relevant.</p>
<p>Background material:</p>
<p>References</p>

<p>Title</p> <p>Reduction of fishing pressure and development of Good Environmental Status delineation, supported by no go areas to determine benthic species recovery and potentially natural communities.</p>
<p>Submitted by: ACTION Project and associated HELCOM ACTION WP2.2 workshop</p>   <p>Co-funded by the European Union</p>
<p>Description of measure</p> <p>Instead of displacing the fishing pressure, an overall reduction of fishing pressure (e.g., by reducing the contact of the fishing gears with the seafloor) would likely enable areas impacted by fishing activities to develop more stable and natural (undisturbed) habitat characteristics. While it does not appear to bring any immediate benefit from diminishing the fishing effort on already trawled areas (based on modelled predictions from the DISPLACE), the model does suggest that providing areas where the fishing impact is reduced could be most relevant in areas impacted by intermediate level of fishing pressure. Such an approach could maintain a balanced level of fisheries activities in the highly productive zones without risking the displacement of higher activity to areas already less strongly impacted by bottom contacting trawling. Therefore, an overall reduction of fishing pressure associated no-go areas to maintain a network of untrawled areas, particularly associated with an appropriate network of well-connected habitat types, may also enable a stable and 'natural' benthic community to develop, thereby providing some guidance in setting threshold values for good status.</p>
<p>Activity: Fish and shellfish harvesting (bottom-touching towed gears, professional, recreational)</p>
<p>Pressure: <i>Physical loss (due to permanent change of seabed substrate or morphology and to extraction of seabed substrate)</i> <i>Physical disturbance to seabed (temporary or reversible and recovers within 12 y)</i></p>
<p>State: Seabed habitats</p>
<p>Extent of impact: Local in most direct sense but with broader regional importance (e.g. refugia and reference areas) also and dependent on scale of regulation.</p>
<p>Effectiveness of measure</p>
<p>Cost, cost-effectiveness of measure:</p>
<p>Feasibility:</p>
<p>Follow-up of measure: The overall impacts could be encapsulated with existing (under development) assessments, though focussed assessment on reference areas would likely be valuable.</p>
<p>Background material:</p>
<p>References</p>

<p>Title</p> <p>Public awareness of potential impact of human activities on coastal ecosystems</p>
<p>Submitted by:</p> <p>ACTION Project and associated HELCOM ACTION WP2.2 workshop</p> <div style="display: flex; align-items: center; gap: 20px;">   </div>
<p>Description of measure</p> <p>Many activities taking place in coastal areas at the local and private scales are simply behaviour or practical solutions that have been carried out without a broader understanding of their impacts (e.g. local dredging, dumping of that material, fishing). With increasing use of the coastal environment and expanding/increasing population, the aspect of public awareness is critical. Not only is it vital that the public are aware of the impact of their own actions, even at the local or small scale, but such awareness will be a significant factor in the acceptance and following of any other measure targeting activities and requiring behavioural changes. Awareness, for example, of the best available practices for dredging, any new requirements (if implemented), the impact of activities, habitats and species that are under pressure, or fish species that should preferentially be eaten (others not), would all provide a basis for local action and acceptance of new measures. Comprehending that small actions can support an improvement of status, and the larger knock-on effect of local action at the sub-regional/regional scale (especially for mobile species), can only be beneficial.</p>
<p>Activity:</p> <p>Tourism and leisure activities (boating, beach use, water sports, etc.) Restructuring of seabed morphology (dredging, beach replenishment, sea-based deposit of dredged material)</p>
<p>Pressure:</p> <p><i>Physical disturbance to seabed (temporary or reversible and recovers within 12 y)</i></p>
<p>State:</p> <p>Seabed habitats</p>
<p>Extent of impact:</p> <p>Local in most direct sense but with broader regional importance also.</p>
<p>Effectiveness of measure</p>
<p>Cost, cost-effectiveness of measure:</p>
<p>Feasibility:</p>
<p>Follow-up of measure:</p> <p>The overall impacts could be encapsulated with existing (under development) assessments.</p>
<p>Background material:</p>
<p>References</p>

<p>Title</p> <p>No further expansion of fishing effort to areas not already impacted by existing fishing activities.</p>
<p>Submitted by: ACTION Project and associated HELCOM ACTION WP2.2 workshop</p> <div style="display: flex; align-items: center; gap: 20px;">   <p style="font-size: small;">Co-funded by the European Union</p> </div>
<p>Description of measure</p> <p>The DISPLACE model indicates that in the Baltic Sea the dominance of short-lived benthic species means that little significant evidence is found for improvements in the benthic community by the displacement of fisheries activity away from peripheral areas. There are however certain caveats that need to be considered. The longevity trait is utilised as the primary factor on which the model assesses the fragility of the benthic species, and this may overlook other significant factors (e.g. the importance of a few long-lived keystone benthic species for predators and food web function, or more historic/pristine conditions where the benthic community may have included other species). However, a precautionary approach based on the currently available analysis would suggest that fishing effort should be limited to existing trawled areas so that non-impacted areas are not exposed to activities that could result in a dramatic degradation of their current status.</p>
<p>Activity: Fish and shellfish harvesting (bottom-touching towed gears, professional, recreational)</p>
<p>Pressure: <i>Physical disturbance to seabed (temporary or reversible and recovers within 12 y)</i> <i>Physical loss (due to permanent change of seabed substrate or morphology and to extraction of seabed substrate)</i></p>
<p>State: Seabed habitats</p>
<p>Extent of impact: Scale could vary from localised to sub-regional or regional. How the approach is applied would influence the scale or extent of potential impacts.</p>
<p>Effectiveness of measure This precautionary approach would be an effective way to prevent any extension of potential loss/disturbance</p>
<p>Cost, cost-effectiveness of measure: This approach would protect areas currently untrawled thus costs in the form of losses to fishermen would not occur (i.e. these areas are currently not trawled)</p>
<p>Feasibility: High.</p>
<p>Follow-up of measure: The overall impacts could be encapsulated with existing (under development) assessments, though specific monitoring could also be implemented.</p>
<p>Background material:</p>

References

The final deliverables and report from this WP and activity in the ACTION project are under preparation (published shortly). A recent summary of the work is available here:

[https://portal.helcom.fi/meetings/STATE%20-%20CONSERVATION%2011-2019-](https://portal.helcom.fi/meetings/STATE%20-%20CONSERVATION%2011-2019-662/MeetingDocuments/8J-2%20Update%20from%20ACTION%20Project%20WP2%20Impacts%20on%20the%20seabed.pdf)

[662/MeetingDocuments/8J-](https://portal.helcom.fi/meetings/STATE%20-%20CONSERVATION%2011-2019-662/MeetingDocuments/8J-2%20Update%20from%20ACTION%20Project%20WP2%20Impacts%20on%20the%20seabed.pdf)

[2%20Update%20from%20ACTION%20Project%20WP2%20Impacts%20on%20the%20seabed.pdf](https://portal.helcom.fi/meetings/STATE%20-%20CONSERVATION%2011-2019-662/MeetingDocuments/8J-2%20Update%20from%20ACTION%20Project%20WP2%20Impacts%20on%20the%20seabed.pdf)

<p>Title</p> <p>Areas around windfarms as potential refugia</p>
<p>Submitted by:</p> <p>ACTION Project and associated HELCOM ACTION WP2.2 workshop</p> <div style="display: flex; align-items: center; gap: 20px;">   <p style="font-size: small;">Co-funded by the European Union</p> </div>
<p>Description of measure</p> <p>Maintain areas around windfarm construction free from fishing activities, particularly those impacting the seafloor, to support benthic habitats and communities and the associated food web. The role of such areas, particularly within a broader network of benthic habitats or protected zones, should be regulated and researched to understand the potential benefit in supporting Good Environmental Status.</p> <p>Construction of windfarms create an initial and often immediate impact on the benthic habitats, the footprint of the structures clearly creating a loss of habitat. These areas, however, may subsequently attract and provide refugia for species, mobile (e.g., pelagic) and more sedentary (e.g., benthic species). In addition, the new constructions provided by hard structures could perceivably represent habitat for certain species associated with hard substrates. More significantly, these areas may represent important staging points for certain species and the associated food webs, and processes linked with them. These areas should be tightly regulated to prevent activities (e.g., prevention of fishing or shipping) that cause disturbance of the seafloor and pelagic habitats (and associated biota), and the biodiversity and status of these zones should be monitored and researched to fully understand their potential contribution to Good Environmental Status in the Baltic Sea region.</p>
<p>Activity:</p> <p>Fish and shellfish harvesting (bottom-touching towed gears, professional, recreational) Multiple ofther activities also relevant</p>
<p>Pressure:</p> <p><i>Physical loss (due to permanent change of seabed substrate or morphology and to extraction of seabed substrate)</i> <i>Physical disturbance to seabed (temporary or reversible and recovers within 12 y)</i></p>
<p>State:</p> <p>Seabed habitats Pelagic habitats</p>
<p>Extent of impact:</p> <p>Local in most direct sense but with broader regional importance (e.g. refugia and reference areas).</p>
<p>Effectiveness of measure</p>
<p>Cost, cost-effectiveness of measure:</p>
<p>Feasibility:</p>
<p>Follow-up of measure:</p> <p>The overall impacts could be encapsulated with existing (under development) assessments, though focussed assessment on reference areas would likely be valuable.</p>
<p>Background material:</p>
<p>References</p>