



Document title	Outcome of SOM FISH WS 1-2019
Code	3-3
Category	DEC
Agenda Item	3 – Implementation and update of the Baltic Sea Action Plan
Submission date	18.2.2020
Submitted by	Secretariat

Background

The HELCOM workshop on the sufficiency of measures analysis for fish (SOM FISH WS 1-2019) was held in Warsaw, Poland 4-6 November 2019. The notes from the Workshop are set out in the Annex to this document.

The Workshop focused on matters related to sufficiency of measures but also followed up on the work of FISH 10-2019 regarding concretization of existing HELCOM actions. The Meeting agreed on a way forward with regard to a number of actions for consideration by FISH 11-2020, as further specified in Annex 2 of the notes. However, the Workshop agreed that some actions related to migratory fish should be considered by FISH-M 7-2020 to be held on 10 February 2020.

SOM-FISH WS 1-2019 further discussed potential new measures that may be considered as possible new actions in the updated BSAP. FISH 11-2020 may wish to consider the outcome of these discussions, as further specified in the notes of the Workshop, together with the synopsis for proposed new actions to be submitted in a separate document under Agenda Item 3.

Action requested

The Meeting is invited to consider the notes from SOM-FISH WS 1-2019 and take action as appropriate.



Notes from the Workshop on the analysis of sufficiency of measures for fish (SOM-FISH WS 1-2019)

Table of contents

Introduction.....	1
Concretization of existing HELCOM actions	1
Sufficiency of measures analysis and update of the Baltic Sea Action Plan.....	1
Effectiveness of measures survey	2
Pressure-state linkages survey	3
New measures	4
Wrap-up and closing of the Workshop	7
Annex 1 List of participants	8
Annex 2 Ongoing work to rephrase and concretize existing HELCOM actions as needed.....	9

Introduction

The HELCOM workshop on the sufficiency of measures analysis for fish (SOM FISH WS 1-2019) was held in Warsaw, Poland 4-6 November 2019. Ms. Marta Rabczynska-Kapcinska, Deputy Director of the Fisheries Department, Ministry of Maritime Economy and Inland Navigation of Poland, welcomed the participants to the Workshop and to Warsaw.

The list of participants is contained in **Annex 1**. The portion workshop concerning the SOM analysis surveys was facilitated by Ms. Sara Estlander from Bionautit. Ms. Heini Ahtiainen, Mr. Luke Dodd, and Mr. Markus Helavuori from the HELCOM Secretariat and Ms. Sara Estlander from Bionautit took notes at the workshop.

Concretization of existing HELCOM actions

The Workshop considered document 4-1 on concretization of existing HELCOM actions, based on the outcome of FISH 10-2019. The outcome of the discussions for each action is described in detail in the attached **Annex 2**.

The Workshop supported the outcome of FISH 10-2019 to organize a FISH-M workshop back to back with FISH 11-2020. The Workshop further proposed that the FISH-M Workshop, in addition to developing common guidelines on breeding, rearing and releasing salmon and sea trout as reintroductions in potential salmonid rivers, should also consider actions related to salmon and sea trout, as further specified in **Annex 2**.

Sufficiency of measures analysis and update of the Baltic Sea Action Plan

The Workshop took note of the presentation of the general approach for the sufficiency of measures analysis and its contribution to the update of the HELCOM BSAP (document 1-2, presentation 1) and the presentation of the specific approach proposed for fish topics (document 1-4, presentation 2). The Workshop further noted that an invitation for nominations of additional experts to contribute to SOM surveys will be circulated soon, and that the aim is to complete the surveys by the end of the year.

The Workshop took note that the SOM analysis estimates environmental conditions using 2016 as the model's base year and that therefore the preferred stock data would come from 2016. The Workshop discussed the approach of using 2016 ICES stock assessments as the basis for consideration, noting that the stocks have changed since then, in particular when it comes to the eastern Baltic cod populations. The Workshop agreed that this issue should be taken into consideration in finalising the survey structure.

Effectiveness of measures survey

The Workshop took note of the effectiveness of measures survey for fish. The Workshop discussed the difficulty of assessing relative effectiveness and ways of improving the survey questions. The Workshop took note that summary of survey data can be sent to the respondents, but feedback to individual respondents is not possible due to resource constraints. The workshop also took note of a similar resource constraint with the suggestion to alter the axis labels in the grid question for each different pressure type.

The Workshop suggested the following general revisions and clarifications to the effectiveness of measures survey:

- Emphasize the possibility to skip questions
- Species and pressures being assessed needs to be more prominent in the survey question text
- Concern that answers are lost when using the previous page button, ACTION project to investigate
- Identified a possible scaling issue with the grid question and suggested instructing respondents to place the highest effect measure on the far right of the grid, ACTION project to consider
- Change low effect to no effect in the scale bar of the grid
- Survey needs an overview including the topics covered and a progress bar if possible
- Specify if time lags are to be considered when assessing effectiveness
- Define certainty more clearly
- Clarify that the fishing pressure is based on fish mortality not landings and simplify pressure name
- Consider the order of questions (pressures) to improve the flow of the survey
- Specify that assessment assumes current management status
- Consider providing video instructions
- Survey introduction text misleading, create specific introduction for each survey
- Consider providing video instructions
- Some measure types have very uncertain magnitudes, e.g. seasonal closures, could need further specification

The Workshop noted the proposed effectiveness of measures structure, including geographic scope, for all pressures:

- Coastal fish (whole Baltic)
- Cod (whole Baltic)
- Flatfish (whole Baltic)
- Migratory fish (whole Baltic)
- Pelagic fish (whole Baltic)

The Workshop suggested the following revisions and clarifications to the effectiveness of measures structure, including geographic scope:

- Flounder is a coastal fish for the purposes of this survey
- Separate eel from salmon and seatrout for river connectivity pressure

The Workshop noted the proposed measure type list and suggested the following changes and clarifications:

- For fishing pressure, add "Technical measures to reduce unwanted species" and "Technical measures to regulate size composition of catch"

- For fishing pressure, where appropriate add either “Measures to reduce recreational fishing capacity” or “Measures to reduce commercial fleet capacity”
- For fishing pressure, remove “Reduce fishing effort with gears with high levels of bycatch”
- For fishing pressure, remove “Tighten restrictions and control on catch dumping and upgrading, improve practices to limit discards” and use as an example for compliance measure type
- For riverine habitat pressure, add “ensure minimum ecological flow” and “liming”
- For riverine habitat pressure, add the word riparian to “river habitat restoration”
- Rephrase riverine fish habitats to add restoration and rehabilitation
- Riverine fish habitat measures should cover dam removal, quality and quantity of habitats
- Separate “support existing stocks” stocking measure into salmon and seatrout, coastal fish, eel
- Fish passage measure type should mention both up- and down-stream connectivity
- Note that shallow coastal habitat includes nearby inland waters
- Explore possibility to allow for additional text responses to the compliance measure type
- Include measure types that cover the five broad classes of measures, related to: season, space, size of fish, quantity of fish and effort
 - o Add size-selective gear and regulation
 - o Rephrase “Catch regulations and restrictions” as restrictions on quantity being extracted
 - o Add regulations/restrictions on fishing effort
 - o remove the words “implementation of long-term”
 - o Remove awareness as an individual measure because it is included in the other measures
- Modify coastal habitat MPA measure type to either include more general protections e.g. MSP as “restriction of activities affecting coastal fish habitats” or add a measure to include these types of protections
- Coastal habitat should be coastal fish habitat, same with riverine habitat
- Consider adding food-web effects as a separate pressure, to include biomanipulation/reduction fishery, restoration/construction of wetlands
- Difficult to have the two stocking measures on the same grid
- Reword outreach measure to be more specific

Pressure-state linkages survey

The Workshop took note of the pressure-state survey for fish. The Workshop agreed that identifying the correct expert pool for the survey was critical. The Workshop noted that the percent reduction questions would likely be based solely on expert opinion. The Workshop further noted that the SOM analysis only includes human-induced pressures. The Workshop suggested to provide the possibility for experts to add missing pressures to the survey though e.g. free text but noted strong concerns by the ACTION project about the ability to compare open responses characterizing differently worded pressures. The Workshop suggested that ACTION project should preselect some pressures to shorten the list but noted that this approach had been adopted following previous comments requesting to avoid any prior selection of pressures to allow experts to choose the main pressures. The Workshop also suggested that respondents be allowed to select the geographic area they are responding to but noted that would not be methodologically possible.

The workshop suggested the following general revisions and clarifications to the pressure-state survey questions:

- Emphasize the possibility to skip questions
- Include the ability to indicate level of confidence or level of data contribution
- Include more example responses in the survey directions, i.e. what do 0% and 100% represent?
- Provide respondents a more extensive introduction and background to the survey that gives context to the expected outcome, indicates how a respondent’s answers will be used, and uses direct and clear wording

- Include the word human in the question text “most significant [human] pressures”
- Add a pressure similar to “human induced food web modifications”
- Add a pressure similar to “spread of disease”
- Clarify that respondent can choose fewer than 6 pressures, but perhaps require at least 3 pressures
- Reorder the questions so that respondents first select the pressure and then answer on its significance before moving to the next pressure
- Use EU eel GES and evaluate against population size
- Reword perch and piscivores to “coastal piscivores and perch”, possibly also include list of relevant species
- Clarify that the significance question covers both the extent of the pressure and the sensitivity of the species to the pressure
- Reword questions on time lags to be about changes in pressures and state, not between pressures and state
- Include more complete instructions to make clear the purpose for the max and min responses
- Reword question “consider all the pressures listed [you chose]”
- Make the maps available when answering the questions
- Add rivers to the salmon map
- Revise trout map, as it is misleading due to inclusion of offshore areas, ACTION project to consider

The Workshop suggested the following revisions and clarifications to the topic structure, including geographic scope, for the pressure-state survey:

- Use plaice as an example of a commercial benthic fish, use a single geographic area
- Do not analyse remaining commercial benthic fish e.g. flounder, dab, sole, etc.
- Probably exclude the Quark for both cod and sprat, but will come back with expert opinions
- The Sound should be included for cod and sprat
- Suggest dividing salmon into 6 assessment areas, leave final decision to topic team
- Leave sea trout decision to topic team
- Need a separate pressure map for migratory fish, consult topic team
- Northern Baltic Proper incorrectly excluded, Swedish data available
- Make clear for coastal fish and sea trout that the analysis only represents coastal areas
- Divide eel into 5 areas: West coast, south coast, north, exit fisheries, coastal DK and SE, ACTION project to consider how/if the model can accommodate this spatial structure

The Workshop discussed the proposal of excluding areas without existing coastal fish assessments. The Workshop noted that data exists for many of these areas and strongly agreed that these areas should not be excluded. The Workshop noted that analysing those data would likely need to utilize the alternative formulation of the pressure-state question for state components without GES thresholds (percent state improvement resulting from specific reductions in pressures) but requested that the Secretariat and ACTION project review the situation before proceeding. The Workshop also noted that the survey changes would be reviewed by the SOM Fish topic teams before being distributed for additional quality assurance.

New measures

The Workshop took note of document 4-2 on discussion on new measures. In this context, the Workshop also took note of the call for synopsis on potential new HELCOM actions, which had been circulated by the Secretariat to all Working Groups and subsidiary bodies earlier this year. The Workshop noted that inter alia Contracting Parties, projects and observers are encouraged to prepare proposals on new actions for the updated BSAP by use of the predefined format for synopses by the end of 2019, as agreed by HELCOM 40-2019.

The workshop noted information presented by SLU Aqua (Presentation 3) on various potential measures to restore coastal fish habitats to either support fish productivity or reduce fish mortality. Based on a review conducted by HELCOM Fish Pro III (HELCOM thematic assessment of coastal fish, 2018), scientific evidence to follow-up on their effectiveness is only available for part of them. The Workshop agreed that a way to support an increased evidence base would be to encourage the mutual sharing of experiences among countries.

With respect to measures to support coastal fish productivity, the Workshop noted in particular the potential of restoration of stony reefs in areas where these have previously been depleted, and the establishment of wetland areas to support the recruitment of freshwater spawning coastal fish (mainly pike and perch) in areas where natural spawning habitats have been lost. The Workshop took note of results from studies on the effect of no-take areas in Swedish coastal areas indicating a local many-fold increase in the size and biomass of piscivorous coastal fish within a short time-frame, of a few years. However, studies in the same areas also indicate that a large part of the anticipated effect is counteracted by predation from seals and cormorants, which are increasing in Swedish coastal areas.

The Workshop agreed that to reach sufficient measures for coastal fish in the Baltic Sea it is important to consider the combined effects of mortality from fishing and natural predation from cormorants and seals. The Workshop took note that there is a real risk in some areas that the environmental objectives for coastal fish will not be possible to reach without consideration of how food-web interactions affect coastal fish. The Workshop also noted that other inter-species interactions could also be considered.

The Workshop concluded on a package of measures for coastal fish that should be further considered for inclusion in the updated BSAP, or for expansion in relation to the current level of implementation in order to cover more areas. The Workshop agreed that the package could include:

- restoration of lost stony reefs;
- re-establishment of coastal wetland spawning areas;
- enhanced protection of coastal fish habitats from physical degradation; and
- the establishment of no-take areas in coastal areas; and
- seasonal closures and other types of fishing regulations.

The Workshop further proposed that HELCOM should initiate activities to ensure that food-web related issues with a focus in interactions between coastal fish, seals and cormorants are discussed and considered in the BSAP update process, with the aim to ensure prospects to reach good environmental status for all of these. Potential ways forward to reach this aim should be considered and may initially include identification of minimum threshold values for cormorant populations or implementation of local spatial management in coastal areas, including zoning. In this context, the Workshop noted that birds are not within the mandate of the Fish Group, and consequently invited the State & Conservation Working Group to take note of this discussion.

The Workshop welcomed the offer by SLU Aqua to develop synopses for potential new actions based on the above discussion and invited interested parties to support and contribute to the work. The results and recommendations of the Fish Pro III project, as well as information on essential fish habitats from the Pan Baltic Scope should also be considered in this context. The Workshop agreed that the proposal should also include reference to the need for countries to invest in the evaluation of effectiveness of the measures and sharing information on this regionally. The Workshop recalled that synopses for new actions should be submitted to the Secretariat (ullali.zweifel@helcom.fi) by the end of 2019.

The Workshop noted that potential new actions for the BSAP have been discussed within the BSAC, which one of the main issues identified being the issue of seal fisheries interactions. The view was expressed that relevant action should be taken on the matter, and that HELCOM would be the appropriate forum for such discussions. The Workshop considered a number of other proposed potential actions, that the [BSAC Working](#)

[Group on Ecosystem Based Management](#) (Copenhagen, Denmark, 18-19 September 2019) had agreed on, as follows (with comments by the Workshop *in italics*):

- undertaking further upstream efforts to allow migration of fish to the spawning grounds (river connectivity). *In this context the Workshop agreed that different mitigation measures are needed for different species of migratory fish (salmon, sea trout, eel, sturgeon, lamprey);*
- supporting joint work on the food web dynamics in the Baltic Sea in HELCOM. *The Workshop noted that this relates in particular to the situation of the eastern Baltic cod but also coastal and other fish species. The Workshop agreed on the importance to address the matter, noting the current lack of data;*
- monitoring invasive species, including the participation of fishermen and the facility to develop new gears, and research into how the invasive species could be commercialised. *The Workshop noted that current work in HELCOM related to non-indigenous species is focused on prevention of new introductions, rather than adaptation methods;*
- establishing a threshold value for cormorants (GES). *The Workshop agreed on the importance of this issue, but noted that GES may not be the most appropriate value to consider, as a good ecological status of cormorants may have detrimental effects on fish populations;*
- marine litter, in particular derelict fishing gears: “no special fee system”, recycling, uniform approach to port reception facilities. *The Workshop noted that derelict fishing gear are already covered by HELCOM Recommendation 28E/10 on application of the no special fee system but that other type of garbage caught by fishermen should be considered for inclusion within the scope of the Recommendation;*
- gravel extraction. *The Workshop noted that ICES has a Working Group on the effects of extraction of marine sediments on the marine ecosystem (WGEXT), but that HELCOM does not have any recommendations or other instruments on the matter. The Workshop agreed that there may be a need for such guidance to be agreed within the HELCOM framework in order to minimize harmful effects on fish;*
- Marine Protected Areas (MPA). *The Workshop noted that a [BSAC meeting](#) in March 2019 had highlighted a number of proposals related to MPA, and that CCB has submitted a synopsis on a potential new action on this matter to the HELCOM Secretariat.*
- investigating the effectiveness of spawning closures. *The Workshop noted that this matter is also addressed in the survey on effectiveness of measures; and*
- keep underlining the importance of tackling eutrophication and pollutants. *The Workshop noted the importance of addressing eutrophication and pollutants improve the status of fish stocks.*

The Workshop noted that CCB intends to submit synopses on potential new actions to the Secretariat within the established deadline, some of which relate to the above

The Workshop noted document 4-3 on the work of the RETROUT Project and the development of Baltic Sea Guidelines for river restoration best practices, expected to be finalized in 2020. The Workshop noted that implementation of these Guidelines could be proposed as a potential new action in the updated BSAP.

The Workshop agreed that management plans, river restorations practices and rearing and releasing guidelines for all migratory fish species are important.

The Workshop noted that CCB will propose new actions on eel, in particular with regard to upstream measures. CCB will also be proposing to prohibit all recreational fishing of eel.

The Workshop noted information regarding a Danish EMFF funded project regarding stock assessment of sea trout and eel (Havørred AAI Bestandsvurdering, HAAB).

The Workshop noted that the HELCOM Expert Group on Sturgeon Remediation (EG STUR) will submit a synopsis for a potential new action related to the HELCOM Action Plan for the protection and recovery of the Baltic sturgeon.

The Workshop recalled the call from the EU Commissioner for Environment, Maritime Affairs and Fisheries, Mr. Karmenu Vella, for measures on the eastern Baltic cod, encompassing ecosystem based management and it was noted that this should be addressed within the HELCOM framework. Recalling the background document for the 2013 HELCOM Ministerial Meeting “Implementing the ecosystem approach - HELCOM regional coordination”, the Workshop also noted that there are various interpretations on how ecosystem based management is understood and that more work on this is needed for an uniform approach on the matter. The Workshop further noted that ICES is organizing a Workshop on ecosystem based management in February 2020, to which BALTFISH members are also invited.

For cod, the Workshop noted that more understanding is also needed on how various pressures impact the population, but no concrete proposals on new potential HELCOM actions were brought forward.

Wrap-up and closing of the Workshop

The Workshop was considered very successful by all participants and the Secretariat. Discussions were highly engaging and significant progress was made on developing the surveys on pressure-state linkages and effectiveness of measures.

Progress was also made on considering existing BSAP actions, based on the outcome of FISH 10-2019, and on new potential actions. The outcome of these discussions will be submitted to FISH 11-2020 for further consideration

The Workshop thanked Poland for hosting and the excellent facilities and hospitality provided.

Annex 1 List of participants

Name	Organization	Email address	Telephone
Facilitator			
Sara Estlander	Co-op Bionautit	sara.estlander@bionautit.fi	+358 40 5585958
Denmark			
Janne Palomino Dalby	Ministry of Environment and Food	jpda@mfvm.dk	+45 22615769
Estonia			
Ulvi Päädam	Ministry of the Environment	ulvi.paadam@envir.ee	+372 53401971
Poland			
Katarzyna Kaminska	Ministry of Maritime Economy and Inland Navigation	k.kaminska@mgm.gov.pl	+48 22 583 8934
Paweł Łazarski	Ministry of Maritime Economy and Inland Navigation	pawel.lazarski@mgm.gov.pl	+48 22 583 8936
Marta Rabczyńska-Kapcinska	Ministry of Maritime Economy and Inland Navigation		
Adam Lejk	National Marine Fisheries Research Institute	adam.lejk@mir.gdynia.pl	+48 660 475 754
Sweden			
Lena Bergström	Swedish University of Agricultural Sciences	lena.bergstrom@slu.se	+46 104784116
Willem Dekker	Swedish University of Agricultural Sciences	Willem.Dekker@SLU.SE	+46 761268136
Ulrika Gunnartz	Swedish Agency for Marine and Water Management	ulrika.gunnartz@havochovatten.se	+46 765386258
Patrik Kraufvelin	Swedish University of Agricultural Sciences	patrik.kraufvelin@slu.se	+46 104784175
Observers			
Michael Wall Andersen	Baltic Sea Advisory Council (BSAC)	ma@dkfisk.dk	+45 40265040
Nils Höglund	Coalition Clean Baltic (CCB)	nils.hoglund@ccb.se	+46 708679249
HELCOM Secretariat			
Markus Helavuori	Helsinki Commission	markus.helavuori@helcom.fi	+358 40 162 6520
Heini Ahtiainen	Helsinki Commission	heini.ahtiainen@helcom.fi	+358 40 621 3612
Luke Dodd	Helsinki Commission	luke.dodd@helcom.fi	

Annex 2 Ongoing work to rephrase and concretize existing HELCOM actions as needed

Based on the [Outcome](#) of FISH 10-2019, the Workshop was invited to take note of existing actions of the BSAP that are not likely to be finalized by 2021. The Workshop considered those not finalized by FISH 10-2019, as set out below, and in particular proposals highlighted in yellow i.e. where Fish 10-2019 proposed to convene a workshop to develop new or strengthened actions or proposals on who to fully implement the existing actions.

Actions have been categorized according to their need for rephrasing in case of transfer to the updated BSAP. In this regard the Workshop noted that Contracting Parties have agreed to, as a first priority, make an effort to achieve already agreed HELCOM actions (HELCOM 2018 Ministerial Declaration, paragraph 14). If however the existing actions from the BSAP and Ministerial Declaration from 2010, 2013 and 2018 are not fully implemented by 2021, they will be transferred to the updated BSAP. In case of transfer, rephrasing of the actions may be needed to ensure that they are up to date. Any major changes will be approved by HELCOM Heads of Delegation.

A proposal for the categorization of not yet implemented actions with regard to need for rephrasing has been made according to the following:

- Category 1) The actions can remain with current formulation;
- Category 2) Specification is needed e.g. smaller changes, adding target year, but the action will basically remain the same; and
- Category 3) Major changes might be needed. In this regard it should be noted that the updated BSAP should maintain the ambition level of agreed objectives and actions (HELCOM 2018 Ministerial Declaration, paragraph 20).

Table 1: Joint actions related to Fish

Action (origin)	Current status	Comments from FISH 9-2019	Proposal	Outcome of FISH 10-2019	Outcome of SOM-FISH WS 1
Development and implementation of effective reporting systems for by-caught birds and mammals (BSAP)	Partly accomplished	Reporting on by-catch takes place by EU MS to the EC and is further submitted to ICES. The reporting is however done in different ways by the countries and there is a need to further develop existing reporting systems. If a fit for purpose reporting system to support HELCOM work (e.g. indicator assessment) is in place it is however not necessary for HELCOM to set up a separate reporting system. The Meeting:	Category 3. This action could be combined with the above, and rephrased to focus on development of existing reporting systems. Contracting Parties to implement effective monitoring and reporting as appropriate.	The Meeting <u>proposed</u> that this action should be revised as follows: <i>Further development and implementation regionally coordinated fit for purpose reporting systems for by-caught birds and mammals.</i> The Meeting also <u>noted</u> that there is a need to develop in the framework of this action a close cooperation with relevant regional fisheries management bodies (BALTFISH and BSAC). The Meeting <u>proposed</u> that this should be a new HELCOM BSAP action and <u>agreed</u> to revisit the matter in due course,	The Workshop <u>recommended</u> that the <i>Draft Roadmap on fisheries data in order to assess incidental bycatches and fisheries impact on benthic biotopes in the Baltic Sea</i> , agreed by FISH 10-2019 and to be considered by HOD 57-2019, should be used as basis for discussion. The Workshop <u>agreed</u> that the rephrased action could make reference to the Roadmap and follow up on its implementation. The Workshop <u>agreed</u> , nevertheless, that implementation of the Roadmap

		<ul style="list-style-type: none"> - <u>agreed</u> to specify what the reported data should be used for within HELCOM. - <u>proposed</u> to change the wording of the action to "Further development of existing reporting systems". 		considering the work plan for the update of the BSAP.	in 2020 should determine any further details of a new, or more concrete action related to such a reporting system for by-caught birds and mammals.
Continue the efforts underway and enhance co-ordination and evaluation of measures within the Baltic Sea as well as with other European countries, for the conservation of eel stocks, in line with national eel management plans	Partly accomplished	The Meeting <u>acknowledged</u> that further coordination of measures in the Baltic Sea region is essential and proposed that this should be considered as a joint action to be followed-up regularly by the Fish Group. The Meeting also <u>noted</u> that BALTFISH will organize a workshop on eel in spring 2019	This action has been moved from national actions to joint actions. Proposal to organize a workshop on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and seatrout). Based on the outcome, develop new or strengthened actions. (Category 3). Such workshop should also serve the ongoing SOM work, i.e. to evaluate the effect of current measures to improve the state of migratory fish (see also document 3-3)	The Meeting <u>noted</u> that the European Commission is revising the Eel Regulation, and that it may be premature for FISH 10-2019 to make decisions on revising this action. The Meeting also <u>noted</u> that the organization of a workshop would be costly and time-consuming. The Meeting nevertheless <u>agreed</u> that this is a matter of great importance and urgent measures are needed to protect the eel.	The Workshop <u>noted</u> that for eel, there is a state target and that pressures need to be addressed, rather than only measures. The Workshop also <u>noted</u> that discussions within the EU on eel are more on the management level rather than the pressure level and that it may not be worthwhile to wait for EU to conclude on the matter. The Workshop <u>noted</u> the view of the BSAC that measures on dams are needed and illegal fishing (both unreported and poaching, as well as commercial and recreational) should be stopped. The Workshop <u>agreed</u> that the 2007 ambition level needs to be revitalised and further <u>proposed</u> that FISH 11-2020 should establish a HELCOM Eel Task Force to develop a HELCOM programme to ensure successful eel migrations from

					<p>the Baltic Sea drainage basin to their spawning grounds by late 2021 with implementation starting by 2022 and intermediate assessments e.g. in 2024 in order to identify problems and address them. The Workshop <u>noted</u> that active involvement of BALTFISH will eventually be needed in implementation of the programme.</p> <p>In this respect, the Workshop <u>invited</u> Contracting Parties to take the lead in the Eel Task Force and to submit draft Terms of Reference to FISH 11-2020 for consideration.</p> <p>The Workshop further <u>agreed</u> to recommend to rephrase the action as follows:</p> <p><i>Initiate implementation of a Baltic coordinated programme of protective measures ensuring successful eel migrations from the Baltic Sea by 2022, including a monitoring and post-evaluation process of levels of pressures affecting eel that begins no later than 2024.</i></p>
--	--	--	--	--	--

Table 2: National actions related to Fish

Action (origin)	Status in March 2018	Comments from FISH 9-2019	Proposal	Outcome of FISH 10-2019	Outcome of SOM-FISH WS 1
Competent authorities to take immediate action for development of long-term management plans for commercially exploited fish stocks so that they are within safe biological limits and reach agreed targets, such as maximum sustainable yield, improve their distribution and size/age range (salmon)	Partly accomplished (implemented by 2/9)	<p>Sweden: A national management plan on salmon as well as seatrout was developed in 2016 and is under implementation. Targets for salmon rivers exist and concerning trout conservation limits exist for rivers on the west coast of Sweden and are under development for the east coast. Progress has been made in implementing the national programme for eel recovery and work to classify eel rivers is being initiated.</p> <p>Poland: Development of management plans for plans for salmon and seatrout is ongoing. Classification and inventory of rivers with European eel has started.</p> <p>Finland: Finland has adopted national strategies for salmon and seatrout and a strategy for the migratory fish species. A priority for the present Government has been the recovery and re-establishment of migratory fish population in inland rivers and in rivers with inflow to the sea. New</p>	Category 1. Proposal to organize a workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and seatrout). Based on the outcome of the workshop project, proposals could be made for how to fully accomplish this action. Such workshop should also serve the ongoing SOM work, i.e. to evaluate the effect of current measures to improve the state of migratory fish (see also document 3-3).		The Workshop <u>noted</u> that upstream mitigation measures, rearing and releasing methodologies etc. are not part of the existing salmon management plans. The Workshop <u>recognized</u> the importance of addressing these matters within the BSAP, but <u>noted</u> that due to lack of specific expertise present, the Workshop was not in a position to discuss the matter in any detail. The Workshop further <u>agreed</u> to recommend that the next FISH-M Workshop (agreed by FISH 10-2019 to take place in 2020) should consider the matter further.

		resources have been allocated to these activities.			
Competent authorities to take immediate action for development of long-term management plans for commercially exploited fish species (sea trout) so that they are within safe biological limits	Partly accomplished (implemented by 2/9)	<p>Sweden: A national management plan on salmon as well as seatrout was developed in 2016 and is under implementation. Targets for salmon rivers exist and concerning trout conservation limits exist for rivers on the west coast of Sweden and are under development for the east coast. Progress has been made in implementing the national programme for eel recovery and work to classify eel rivers is being initiated.</p> <p>Poland: Development of management plans for plans for salmon and seatrout is ongoing. Classification and inventory of rivers with European eel has started.</p> <p>Denmark: With regard to management plans for seatrout, there are national measures to limit recreational fisheries on seatrout, but to have long-term management plans for commercial sea trout fisheries is not relevant for Denmark since there is very limited commercial fishing on seatrout. Denmark therefore</p>	<p>Category 1. Proposal to organize a workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and seatrout). Based on the outcome of the workshop and RETROUT project, proposals could be made for how to fully accomplish this action. Such workshop should also serve the ongoing SOM work, i.e. to evaluate the effect of current measures to improve the state of migratory fish (see also document 3-3).</p>		<p>The Workshop <u>noted</u> that upstream mitigation measures, rearing and releasing methodologies etc. are not part of the existing sea trout management plans. The Workshop <u>recognized</u> the importance of addressing these matters within the BSAP, but noted that due to lack of specific expertise present, the Workshop was not in a position to discuss the matter in any detail. The Workshop invited the RETROUT Project to consider this action and provide proposals to FISH 11-2020. The Workshop further <u>agreed</u> to recommend that the next FISH-M Workshop (agreed by FISH 10-2019 to take place in 2020) should consider the matter further.</p> <p>The workshop <u>noted</u> a clarification by Poland that it is in fact national river restoration activities that are ongoing, and not the development of management plans, as discussed by FISH 9-2019.</p>

		<p>proposed that the action should be considered as not applicable for Denmark. With regard to eel, Denmark has e.g. reduced gear, more than required by the eel regulation.</p> <p>Finland: Finland has adopted national strategies for salmon and sea trout and a strategy for the migratory fish species. Regional strategies for sea trout are close to being finalized during 2019. A priority for the present Government has been the recovery and re-establishment of migratory fish population in inland rivers and in rivers with inflow to the sea. New resources have been allocated to these activities.</p>			
Competent authorities to implement national programs for the conservation of eel stocks as a contribution to a Baltic coordinated programme to ensure successful eel migrations from the Baltic Sea drainage basin to national spawning grounds	Partly accomplished (implemented by 8/9)	Finland: Finland has adopted a strategy for the migratory fish species. A priority for the present Government has been the recovery and re-establishment of migratory fish population in inland rivers and in rivers with inflow to the sea. New resources have been allocated to these activities. Finland has been implementing the national eel management plan and	Proposal to organize a workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and sea trout). Based on the outcome, develop new or strengthened actions (Category 3). Such workshop should also serve the ongoing SOM work, i.e. to evaluate the effect of current measures to improve	The Meeting <u>noted</u> that the reference to “national spawning” grounds in the original actions is erroneous and does not make sense.	The Workshop <u>proposed</u> that the action should be rephrased as follows: <i>Competent authorities to implement national programs for the conservation of eel stocks as a contribution to a Baltic coordinated programme to ensure successful eel migrations from the Baltic Sea drainage basin to their spawning grounds</i>

		has implemented fishing ban during certain months beyond the EU requirements.	the state of migratory fish (see also document 3-3).		
Competent authorities to take action to implement existing long-term management plans for eel	Partly accomplished (ongoing)		<p>Remaining Contracting Parties are encouraged to accomplish the action by 2021, in which case the action can be deleted.</p> <p>Consideration should be given to strengthening the action or developing new concrete actions e.g. based on the outcome of FISH-M 5-2017 and the BALTFISH workshop on eels, as well as proposed workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and seatrout) (Category 3).</p>		The Workshop <u>agreed</u> that this action is already covered by the above joint and national actions related to eel, and that there is no need for it to be included in the updated BSAP.
Develop restoration plans (including restoration of spawning sites and migration routes) in suitable rivers to reinstate migratory fish species	Partly accomplished (implemented by 7/9)		<p>Proposal to organize a workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and seatrout). Based on the outcome, as well as results of the RETROUT project, develop new or strengthened actions (Category 3). Such a workshop should also serve the ongoing SOM work, i.e. to evaluate the effect of current measures to improve the state of migratory fish (see also document 3-3).</p>		The Workshop <u>agreed</u> that it would be useful if the RETROUT Project and the next FISH-M workshop (agreed by FISH 10-2019) should consider this action in more detail.

Consider additional measures if necessary, such as reducing fishing mortality in accordance with the ICES advice, removing migration barriers, and re-stocking in eel-safe river systems, e.g. utilising the outcomes of co-operation between ICES, HELCOM and other stakeholders on this issue	Partly accomplished (implemented by 3/9)		Proposal to organize a workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and sea trout). Based on the outcome, develop new or strengthened actions (Category 3). Such workshop should also serve the ongoing SOM work, i.e. to evaluate the effect of current measures to improve the state of migratory fish (see also document 3-3)		The Workshop <u>agreed</u> that the measures detailed in this action would be key elements for consideration by the proposed Eel Task Force and the HELCOM programme to ensure successful eel migrations, and that there would consequently be no need for this action in the updated BSAP.
Implementation of non-lethal mitigations measures for seals-fisheries interactions (HELCOM Recommendation 27-28/2) (2012)	Partly accomplished (implemented by 2/9)		Outcomes of HELCOM SFI WS 1-2019 and the BALTFISH Symposium on seal to be used for revising this action (Category 3).	The Meeting <u>noted</u> that the HELCOM Workshop on seal-fisheries interactions will take place on 27 June 2019 back to back with FISH 10-2019. The Meeting <u>agreed</u> that this action should be considered intersessionally based on the outcome and recommendations of that workshop.	The Workshop <u>noted</u> that the HELCOM workshop on seal-fisheries interactions did not provide any concrete proposals on this action. The Workshop <u>agreed</u> that this action addresses an important issue which is needed in the updated BSAP. The Workshop further <u>agreed</u> that there is also a need for a joint action on the matter, and that information on non-lethal mitigation measures should be shared among Contracting Parties and with BALTFISH and BSAC. The Workshop further <u>agreed</u> that the action could be rephrased as follows:

					<i>Implementation and sharing of information among Contracting Parties, BALTFISH and BSAC on non-lethal mitigations measures for seals-fisheries interactions.</i>
Implement existing long-term management plans for eel to improve their distribution size/age-range	Future target year (2021)		Category 1. Proposal to organize a workshop* on developing measures for migratory fish species in autumn 2019 (focus on eel, salmon and seatrout). Based on the outcome, new concrete actions may be proposed.		The Workshop <u>agreed</u> that this action is already covered by the above joint and national actions related to eel, and that there is no need for it to be included in the updated BSAP. The workshop further <u>noted</u> that size/age range is not relevant for eel.
Implement long-term management plans for cod to improve their distribution size/age-range	Future target year (2020)		Category 1. Consider possibly options for revising and strengthening the action.	The Meeting <u>noted</u> that the Baltic cod is in such a state that focusing on improvement of size/age range is not sufficient. The Meeting <u>proposed</u> to revise the action as follows: <i>Define necessary completion of multi-annual plans of cod, within the framework of the CFP for Contracting Parties which are also EU Member States, in order to improve cod size/age-range</i>	The Workshop agreed that this action is of utmost importance, but also noted that the revised action proposed by FISH 10-2019 is not clear, and <u>suggested</u> the following revision: <i>Define necessary complementary measures and completion of multi-annual plans of cod, within the framework of the CFP for Contracting Parties which are also EU Member States, in order to improve cod size/age-range</i>

Existing commitments that are not included in the follow-up system

The following commitment that was previously assigned as “too general”, with a view to its possible concretization in the process of the update of the BSAP and inclusion in the update BSAP was not finalized by FISH 10-2019.

Reduce the negative impacts of fishing activities on the marine ecosystem and to this end, support the development of fisheries management and technical measures to minimize unwanted by-catch of fish, birds and mammals in order to achieve the close to zero target for by-catch rates of the Baltic Sea Action Plan and minimize damage to sea bed habitats.

The Workshop noted that FISH 10-2019 had discussed when by-catch rates become meaningful for the by-caught species. A comment had been made that for some species and/or populations the close to zero target should stay in the BSAP. The Workshop was invited to further consider the commitment and advise as appropriate.

The Workshop proposed that the commitment should be split into separate concrete actions. The Workshop noted that for harbour porpoise, the target should be zero by-catch. The Workshop also noted that a new objective on seafloor integrity will be included in the updated BSAP and that new actions related to the matter are expected and consequentially minimization of sea bed habitats would not need to be addressed as part of this action. Following discussion, the Workshop agreed that the following revision could be used as a basis for the further development of this commitment into more concrete actions:

Reduce the negative impacts of fishing activities on the marine ecosystem and to this end, support the development of fisheries management and technical measures to minimize unwanted by-catch of fish, birds and sea mammals and achieve the close to zero target for by-catch rates of harbour porpoise and other relevant species of the Baltic Sea Action Plan.

The Workshop further noted that the ACTION Project is working on the matter of by-catch,