



Document title	Status of clarifications on the future HELCOM actions
Code	4-15
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Agenda Item	4 – Matters arising from the subsidiary bodies
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Submitted by	Executive Secretary
Reference	Outcome of HOD 49-2015 (para 4.58) ; Outcome of GEAR 13-2016 (paras 3.1-3.3; 3.5; 3.7-3.9)

Background

HOD 49-2015 agreed on 13 future HELCOM actions out of 14 that were proposed as the result of the coordination efforts relating to national PoMs that had taken place in the process of documenting regional coordination of programmes of measures (cf. HOD 49 document 4-26), with the following considerations and open issues:

- Germany, due to a formal study reservation, was not in a position to agree at the meeting on any of the proposed future actions;
- Germany made the specific study reservation on Action 'Exchange of information and development of good practices in the use of blue catch crops and other biomass removal related sea-based measures for diminishing nutrient burden of the Baltic Sea';
- Denmark made a study reservation on Action 'Activities to support conservation of Baltic Sea species and biotopes/habitats categorized as threatened according to the HELCOM Red List';
- HOD 49-2015 agreed on the alternative text proposed by Sweden for Action: 'Assess the role of internal nutrient reserves/accumulated nutrients/stored nutrients in the Baltic and potential management measures', while Denmark made a study reservation on the action;
- HOD 49-2015 noted the proposal from Finland to fine-tune the text of Action: 'Adjustment or utilization of EU data collection framework to retrieve data for assessments and the development of management measures related to by-catch of species' to properly reflect the EU Common Fisheries Policy Data Collection Framework (DCF) process and invited Finland to submit the proposal to Lead country Poland;
- HOD 49-2015 noted the view of Germany to cooperate with OSPAR on the development of the monitoring programmes under Action 'Regional monitoring programme on non-indigenous species in the Baltic Sea';
- HOD 49-2015 noted that the Actions on regional risk assessment of shipping and joint principles for environmental targets of sea-bed habitats are already agreed actions.

HOD 49-2015 requested the Secretariat to identify responsible HELCOM working groups for each action.

Further, HOD 49-2015 considered the draft roadmap to build a knowledge base on underwater noise and the revised version based on the comments by Russia, noting that the draft was also considered by HELCOM MARITIME 15-2015, which should be made more clear on the cover page. The Meeting approved the roadmap as included in Annex 2 of the Meeting Outcome, pending clarification of the study reservation by Russia by 31 January 2016 (para 4.30 of the HOD 49 outcome).

Work done and clarifications made after HOD 49-2016:

- The wording of Action: 'Adjustment or utilization of EU data collection framework to retrieve data for assessments and the development of management measures related to by-catch of species' has been improved according to the proposal by Finland;
- GEAR 13-2016 considered the update of Annex 3 with the actions in the consolidated version of the 'Joint documentation of the regional coordination of the programmes of measures' to reflect the above decisions of HOD 49-2015;
- GEAR 13-2016 took note that Germany can accept Annex 3 if Action on 'Blue-catch crops/mussel farming' is deleted. GEAR 13-2016 noted the German view that there is a risk that the agreed nutrient reduction targets in HELCOM may be undermined by proposing economic activities such as mussel farming as a solution to the eutrophication problem in the Baltic Sea. GEAR 13-2016 agreed to delete this action from Annex 3. **Thereby, the formal study reservation on the future actions by Germany from HOD 49-2015 has been lifted;**
- GEAR 13-2016 agreed to the slight revision to the action 'Management of [internal load/endogenous nutrient reserves/accumulate nutrients/stored nutrients]' proposed by Denmark. **Thereby, the study reservation by Denmark on this action from HOD 49-2016 has been lifted.**
- **Denmark informed that they can lift study reservation on the Action 'Activities to support conservation of Baltic Sea species and biotopes/habitats categorized as threatened according to the HELCOM Red List'.**

The future HELCOM actions on which agreement has been reached so far are included in this document, with the still pending study reservations by Russia on 'Regional Baltic Underwater Noise Roadmap 2015-2017'.

The actions are new activities to be taken forward by the HELCOM working groups, as a follow-up of BSAP. As requested, the Secretariat has identified responsible HELCOM subsidiary bodies for each action (at the end of the descriptions) for all actions except one.

Action requested

The Meeting is invited to:

- take note of the status of clarifications on the future HELCOM actions;
- identify responsible for the Action 'Assess the role of [internal nutrient reserves] [accumulated nutrients] [stored nutrients] in the Baltic and potential management measures'.

Russian Federation is invited to clarify the study reservation on the Regional Baltic Underwater Noise Roadmap 2015-2017.

Future HELCOM actions

ACTION: Assess the role of [internal nutrient reserves] [accumulated nutrients] [stored nutrients] in the Baltic and potential management measures

Short title: Management of [internal load / endogenous nutrient reserves] [accumulated nutrient loads / stored nutrients] (cf. 4.1.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

Transport of nutrients to surface layers from both deep water and sediments accentuates and prolongs eutrophication in the central Baltic Sea and potentially also in some coastal waters. The scale and dynamics of the problem varies from small coastal basins suffering from hypoxia/anoxia to the main deeps of the Baltic Proper. Remedial measures are a potential complement to the external load reductions. It is timely to examine and evaluate these precautionary measures, because external loads as well as inputs of stored nutrients to the productive layer of the Baltic Sea are likely to further exacerbate due to climate change.

Proposed timetable: 2016-2019

Possible steps for implementation:

The first step consists of a scientific workshop on the state of art regarding the nutrient dynamics and management in sediments with the aim of formulating questions that need to be answered and understood about the nature of stored nutrients, dynamics of their transport to the productive layer as well as potential measures to regulate these storages, including requirements for Environmental Impact Assessment.

The second step is mapping significant nutrient stores/stocks and appropriate modelling to answer questions identified in the previous step, as well as to inform the general public and policy makers.

The third step is:

- to identify different type of experimental sites and methods for prototype scale tests. Furthermore, to investigate the environmental, legal, technical and economic challenges that need to be taken into account for prototype scale tests and
- to suggest the design of appropriate standardized monitoring strategies for the respective types/methods.

Description of these challenges should form a basis for guidance documents to be used by environmental authorities when evaluating future applications to use in situ management methods.

Available experimental results from prototype scale tests need to be evaluated against the benchmarks identified in the third step to inform the further development of promising techniques. Both successful and failed remedial approaches will inform the technical guidance in the 'cookbook -toolbox'.

Responsible HELCOM subsidiary body: To be identified.

ACTION: Intensifying HELCOM work to reduce airborne transboundary nitrogen input from outside of HELCOM area, in particular the Gothenburg Protocol
(cf. 4.1.2., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

Airborne nitrogen deposition originating from outside HELCOM area is a significant source of nitrogen input to the sea. This source is managed under the Convention on Long-Range of Transboundary Air Pollution (CLRTAP) and more specifically its Gothenburg Protocol. Prompted by BSAP, HELCOM has previously informed bodies implementing the Protocol of eutrophication requesting action. This has not resulted in desirable action.

In this initiative HELCOM will engage firstly in resolving the most effective ways of influencing the work under the Protocol. Most likely that will involve both national contacts as well as the formal bodies responsible for the Convention. In the second step appropriate action will be taken, using HELCOM material, such as eutrophication indicators, PLC- and LOAD input related assessments and indicators, as well as the MAI/CART related follow-up information as the basis.

There is also a linkage to the NEC Directive in this work for those CPs that are also EU Member States.

The initiative has substantial potential to contribute to the reduction of input of nitrogen to the Baltic Sea and to improve eutrophication status.

Proposed timetable: 2016-2021

Possible steps for implementation:

As a starting point, GEAR supported by PRESSURE and STATE & CONSERVATION could design the work in further detail and identify which bodies in HELCOM should assist in carrying out the work.

Responsible HELCOM subsidiary body: Gear to initiate and Pressure Working Group to continue as part of their work plan

ACTION: Micropollutants in effluents from wastewater treatment plants

(cf. 4.2.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

Micropollutants despite low (ng/L to µg/L) concentrations in environmental samples, due to their environmentally hazardous properties including for example high persistence, high toxicity to aquatic organisms, or endocrine disrupting properties, may pose risk to the environment. Depending on the level of treatment, WWTPs' effluents can be a significant pathway of micropollutants to the environment, in particular for those that originate from household products and -articles, or personal use. As knowledge of the environmental situation with regard to those pollutants can be improved, survey based on existing national data, screening studies and monitoring programs should be considered as a first step. The other activity should concentrate on knowledge on wastewater from treatment plants as sources of micropollutants in the environment and evaluation of existing and novel WWT techniques by compiling existing information on e.g. feasibility, costs, and good practice.

The Baltic Sea (and possible coordination with OSPAR).

Proposed timetable: Start during 2016, until the end of 2017

Possible steps for implementation:

- Step 1: Compilation and assessment of available information and data of micropollutants of concern for Contracting Parties in the Baltic Sea – during 2016 (PRESSURE)
- Step 2: Compile information from CPs of treatment techniques and experiences– during 2016/7
- Step 3: Summary report on advanced treatment techniques, including consideration of feasibility, costs, good practice and management options – during 2017.

Responsible HELCOM subsidiary body: Pressure Working Group (sources) in cooperation with State and Conservation Working Group (status); Request for information on micropollutants included in a questionnaire within PLC-6.

ACTION: Regional risk assessment tool for ships (cf. 4.3.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

In the recent past (2012), HELCOM BRISK and BRISK-RU projects delivered an assessment of risks for shipping accidents and resulting spills of oil and hazardous substances as well as proposed improvements in the response capacities and safety of navigation for consideration by the Contracting Parties. No Baltic Sea risk assessments have been carried out since these projects.

A regional risk assessment tool for ships is needed to enable more frequent update on the risks for shipping accidents and spills from the Baltic Sea perspective to cater for constantly changing ship traffic patterns.

In order to enable continuous development by the wider Baltic response community (including academia) the tool should be flexible, based on open source coding, and be run frequently (annually/biannually) with less resources than is typically done when using commercial applications.

The main function would be to detect changes in shipping risks and point to the hot spot areas as a basis for:

- optimizing the preparedness and response capacities on regional and sub-regional levels (according to the Helsinki Convention and HELCOM Response Manual);
- detailed national/sub-regional/regional investigations and efforts to improve safety of navigation.

Such a tool should have application potential worldwide and for this reason this development could be undertaken together with one of the other regional seas. It could well be a further development of existing tools such as the IALA IWRAP and/or other approaches to risk assessment such as those utilized by FSA. The Baltic Sea could be a pilot area for a test run of the tool.

The Baltic Sea (action to be possibly undertaken together with one of other regional seas)

Proposed timetable: Preparations for the activity could be started 2015/2016. Implementation could start in 2017 and end by 2019.

Possible steps for implementation:

Specification of the tool would be based on the needs of the Contracting Parties as well as availability of the data (e.g. HELCOM AIS).

Existing suitable risk assessment models and tools should be mapped, including in other regional seas.

Responsible HELCOM subsidiary body: Maritime Working Group, Response Working Group to be also involved; Preparation of the project proposal to DG ECHO call ongoing by the HELCOM Secretariat with involvement of other RSCs.

ACTION: Coordination of management measures of pressures and impacts on MPAs, in particular for adjacent transnational MPAs

(cf. 4.4.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

HELCOM Recommendation 35/1 (para m) recommends that HELCOM MPA related guidelines and guiding documents should be updated as necessary in order to keep them in line with new knowledge and compatible with other international criteria

Coordinated management guidelines for the same pressures in the same area gives adjacent transnational MPAs better and more comprehensive protection of species the marine nature values in these areas.

Proposed timetable:

Provide a first insight to coordination of management of measures in adjacent transnational MPAs by 2016.

If the action is expanded to include a review and revision of HELCOM guidelines for management plans in general (point 9, step 3), the action is estimated to take several years and will need implementation through a project.

Possible steps for implementation:

- 1) identify adjacent transnational MPAs using HELCOM MPA database and invite Contracting Parties to inform on any contacts between MPA managers,
- 2) make an inventory of the steps and management measures that Contracting Parties have already taken in MPAs, e.g. concerning fisheries and shipping,
- 3) investigate if existing management guidelines relevant for the Baltic Sea provide sufficient guidance to address pressure and impacts, including HELCOM guidelines and those related to the Habitats and Birds Directive, and as need may arise identify where HELCOM can provide complementary guidance, in particular for management of transnational MPAs.

The activity should be carried out linked to the development of conservation plans for e.g. HELCOM Red listed species, also considering the adequate protection of species in adjacent MPAs.

The information in the HELCOM MPA database should be up to date regarding the MPA management plans, including for transnationally located MPAs. Network for managers responsible for these MPAs should be established.

Responsible HELCOM subsidiary body: State and Conservation Working Group.

ACTION: How to consider MPAs in Maritime Spatial Planning and vice versa?

(cf. 4.4.2., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

The Ecosystem approach provides guiding principles for Maritime Spatial Planning (MSP). MSP is to consider any restrictions and regulations to MPAs provided through MPA management plans. Some activities are however allowed within MPAs, while conservation objectives may be affected by activities causing pressure outside the MPAs. Thus, MPA/MSP interaction is not delimited by the MPA borders and there is a need to consider activities both inside and outside MPAs in the MSP context and vice versa.

Proposed timetable: The action could start in 2016. Tentatively development of regional guidelines could take up to 3 years.

Possible steps for implementation:

- 1) Contracting Parties in HELCOM VASAB MSP WG could be invited to inform on how MPAs have been considered so far in national MSP plans as well as any background information already compiled by the group with a view to sharing information with State and Conservation,
- 2) set up a workshop or back-to-back meeting with State and Conservation and HELCOM-VASAB MSP Working Group to discuss how the action can be jointly taken forward.

The workshop could explore options for how to acknowledge MPAs in MSP and vice versa (possible options are protocol/guidance, amended workplans, ad hoc meetings etc.

In the longer-term some form of joint regional guidelines could tentatively be developed.

Responsible HELCOM subsidiary body: State and Conservation Working Group and HELCOM-VASAB Maritime Spatial Planning Working Group; HELCOM-VASAB MSP WG 12-2016 was positive towards the action as a joint activity between the HELCOM-VASAB MSP WG and HELCOM S&C and agreed, as a first step, to request Contracting Parties/Member States to inform how MPAs are taken into account in the MSP.

ACTION: Develop joint tools/approach for assessing effectiveness of spatial protection measures for individual sites as well as network level

(cf. 4.4.3., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

HELCOM Recommendation 35/1 calls for assessing “the effectiveness of the management plans or measures of HELCOM MPAs by conducting monitoring, and where feasible scientific research programmes, which are directly connected to the conservation interests of HELCOM MPAs, including the placement of monitoring stations inside the MPAs “ (para k).

Proposed timetable:

The action could start in 2016 but the start will depend on resources. It can be noted that HELCOM is partner to a 2015 Life+ application where development of an approach to assess management effectiveness of MPAs is included.

Possible steps for implementation:

- 1) Meeting to transfer lessons learnt from OSPAR process.
- 2) Develop criteria on how to assess effectiveness of management for single MPAs and for the network as a whole, making use of work carried out in OSPAR and elsewhere.

Responsible HELCOM subsidiary body: State and Conservation Working Group.

ACTION: Activities to support conservation of Baltic Sea species and biotopes/habitats categorized as threatened according to the HELCOM Red List¹
(cf. 4.5.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

A set of actions aimed at improving the state of Red listed species and biotopes/habitats in the Baltic Sea are included in this action. For effective conservation several supporting analyses are planned to be undertaken with the view of coordinating measures as relevant (State and Conservation 1-2014).

Based on these analyses, area specific conservation programs to protect species and biotopes/habitats categorized as threatened according to the HELCOM Red List could be developed for the following basins: A, B, C, D. When applicable, the implementation of the programs will be coordinated by relevant contracting parties.

In addition, the State and Conservation Working Group should develop “by 2017 guiding documents on conservation, recovery or action plans and/or related management measures for HELCOM threatened species, biotopes/habitats or species groups and their habitats”. These guidelines will directly support the implementation of area specific conservation programs and the improvement of HELCOM Red listed species and biotopes/habitats.

Analyses and guidelines will be developed with a Baltic Sea perspective, however to consider a wider geographic perspective as needed for migratory species. Coordinated measures could furthermore be relevant on a sub-basin scale.

Proposed timetable: 2016-2020

Possible steps for implementation:

- 1) to make an inventory of existing measures that will contribute to the improved status of threatened species and biotopes/habitats and analyze if they are sufficient to improve the state of those species
- 2) based on this gap analysis; identify the need for new measures and for which new measures it could be suitable to consider joint measures (regional plans) or coordinated measures (coordination of national measures)
- 3) Development of by 2017 guiding documents on conservation, recovery or action plans and/or related management measures for HELCOM threatened species, biotopes/habitats or species groups and their habitats

State and Conservation Working Group to lead the activities. Agreed analyses on existing measures to be carried out by Contracting Parties. A Lead Country approach to be considered for development of the guidelines. It should also be considered to set up an intersessional HELCOM group to address conservation of species and biotopes/habitats.

Responsible HELCOM subsidiary body: State and Conservation Working Group.

¹ Note the study reservation by Denmark on this action. Clarification to be discussed in the planned intersessional activity to elaborate the Recommendation on conservation plan for species (cf. paragraph 4.112 of Outcome of HOD 49-2015).

ACTION: Development of joint principles for defining environmental targets for seabed habitats
(cf. 4.6.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

Through the BalticBOOST project HELCOM will develop joint principles and good practices for defining environmental targets for the anthropogenic pressures affecting seabed habitats. To support the development of such environmental targets the project will, as a starting point, explore ways to determine how much disturbance from different activities that specific seabed habitats can tolerate while remaining in Good Environmental Status (GES). The targets need to ensure a sustainable level of human activities (safeguarding a sustainable future use of the marine resources), while not compromising progress towards GES.

The work will focus on some of the major impacts connected with fisheries using mobile bottom contacting gears (otter trawls, Danish seines, Scottish Seines, dredges, beam trawls) but will also address other pressures from human activities on seabed habitats (e.g. dredging, construction etc.).

Based on the information gathered the project will suggest principles and good practices for defining environmental targets.

Proposed timetable: BalticBOOST started in September 2015 and ends in December 2016.

Possible steps for implementation:

The activities will be carried out under the BalticBOOST project. HELCOM GEAR and FISH Group as well as HOLAS II Core team will be consulted in the implementation of the project activity. Guidance for the development of principles will be provided through two workshops with expert participation from HELCOM Contracting Parties.

Recommend to link the project actions to the update of the HELCOM Rec 36/2.

Responsible HELCOM subsidiary body: as indicated above.

ACTION: Adjustment or utilization of EU data collection framework to retrieve data for assessments and the development of management measures related to by-catch of species
(cf. 4.7.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

Joint HELCOM countries being also EU member states input to: the new EC proposal for Data Collection Framework, new multiannual programs for data collection and regional DCF groups.

New DCF Regulation has been proposed in July 2015, in order to make DCF compliant with the reformed Common Fisheries Policy. It is proposed that the new DCF Regulation will define the frameworks for EU multiannual programme for data collection, which will be prepared after adoption of a Regulation. Multiannual programme for data collection will define only stable and basic variables, but other parameters will be more flexible and can be changed with time. The role of regional DCF groups will be strengthened and these groups will decide many of the details. This approach is in line with regionalisation under the reformed Common Fisheries Policy. Such an EU approach may provide room for HELCOM to provide and communicate needs for data collection with the view to be able to scientifically assess the impact of fisheries in the Baltic Sea.

This action could facilitate in:

- Contributing to enhance data collection on incidental catches of harbour porpoise, seals and water birds mainly in the Baltic Sea by-catch “hot spots”, for relevant fisheries (commercial/recreational fishing)
- Identify the most relevant data collection needs on by-catch of protected fish species present in coastal waters

Proposed timetable: To start in late 2016 depending on an EU progress on this issue

Possible steps for implementation:

- 1) Make an inventory of what kind of data is needed from DCF for the HELCOM purposes, and what kind of data will be needed for HELCOM Baltic Sea indicators and environment assessments.
- 2) Ensure that data collected and used in scientific analyses is systematically used by HELCOM or relevant body;
- 3) Preparation of a HELCOM letter to the EC indicating the preliminary needs of HELCOM in the framework of the reformed Data Collection Framework.

Taking into account coordination importance in the implementation of the MSFD in the Baltic Sea region, it should be indicated, that within collection of the “*ecosystem data to assess the impact of Union fisheries on the marine ecosystem in Union and external waters, including data on by-catch of non-target species, in particular species protected under international or Union law, data on impacts of fisheries on marine habitats and data on impacts of fisheries on food webs*” (art. 5 point 2. (b) of the current DCF “bible”) HELCOM would like to be involved in future data collection process at a regional level;

2. Providing HELCOM comments to the project of the Multiannual Community Programme to support the DCF, prepared after adoption of the new DCF regulation, regarding collection of the ecosystem data.

3. Providing HELCOM expert knowledge on environmental issues within DCF though liaising with Regional Coordination Groups. This will provide an opportunity to use certain anonymized marine ecosystem data coming from DCF including data from recreational fisheries, in order to successfully implement environmental obligations for the Baltic Sea region including under MSFD for HELCOM countries being EU

member states. Within the regional coordinating groups HELCOM should also aim at ensuring cooperation with Russia regarding the exchange of environmental data.

Responsible HELCOM subsidiary body: Fish group, led by Poland; The action will be taken further by the upcoming Fish group meeting.

ACTION: Testing alternative fishing gears/fishing techniques to minimize incidental catch through joint project/projects

(cf. 4.7.2., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

The project HELCOM BALTFIMPA aimed at development of a selective and more environmental friendly fishing gears comparing to currently used, has not been continued after failing to obtain LIFE + financing. At the same time, measures in order to minimize negative impact of fisheries on protected species are urgently needed. Therefore, this is a proposal for continuation of activities proposed under HELCOM BALTFIMPA project with special emphasis on minimization of incidental catch problem. Several of the topics are already agreed as a work plan of the HELCOM FISH group.

Information on planning the projects and its outcomes could be provided to BALTFISH.

Information provided by the project should be useful for decision makers to implement measures to reduce incidental catch and by-catch of threatened and endangered species, especially in MPAs.

MAMBO² project proposal should be taken into account.

Relevant financial support for the project coordination should be ensured. National activities under the project for countries being also EU members, could be covered by EMFF 2014-2020.

Proposed timetable: Start planning in 2016, start a project in 2017-2018

Possible steps for implementation:

HELCOM, in cooperation with other relevant organizations, to serve as an information exchange and coordination platform, for mainly nationally funded activities regarding alternative gear development and testing to minimize incidental catch and by-catch particularly in HELCOM MPAs³ and identified hot spots.

- Define potential “hot spots” for incidental catch in the Baltic Sea, including spatial information regarding their location and estimated size
- Make an inventory of available alternative fishing gears/techniques including traditional ones based on existing information, work in other fora and completed and ongoing projects and analyse their usefulness for addressing incidental catch, especially in “hot spots” areas. This should be done in cooperation with fishermen, scientists and nature conservation experts,
- Consider a need for and added value of regional guidelines for fishing in MPAs based on the existing EU and national guidelines
- If useful, prepare HELCOM guidance concerning friendly fishing techniques/gears to minimize incidental catch in HELCOM MPAs* (and possibly in “hot spot” areas) in the Baltic Sea
- Prepare regional guidance for fishermen based on inter alia the HELCOM work on the issue.

Responsible HELCOM subsidiary body: Fish group

² MAMBO project – Management Actions and Conservation Measures for the Baltic Sea Odontocete.

³ Former BSAPs

ACTION: Regional monitoring programme on non-indigenous species in the Baltic Sea
cf. 4.8.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

The Regional monitoring programme on non-indigenous species in the Baltic Sea will provide objective information needed for the evaluation of the progress made towards achieving management goals defined by EU MSFD, EU IAS Regulation, IMO BWMC, and other legislation acts.

Proposed timetable: Start in 2016

Possible steps for implementation:

Milestones, selected, preliminary:

- 2016 (beginning) Workshop to discuss the aim and structure of the monitoring program.
- 2016/2017: Establishment of a regional database on non-indigenous species to accommodate monitoring data built on the existing AquaNIS database and the HELCOM/OSPAR risk assessment tool
- 2017/8: NIS Monitoring Guidelines, including different monitoring methods based on existing experience to be reviewed.

Responsible HELCOM subsidiary body: HELCOM Maritime Working Group (TG Ballast)

ACTION: Regional Baltic Underwater Noise Roadmap 2015-2017

(cf. 4.10.1., Annex 3, GEAR 13-2016 document 3-1 Rev 1)

Background information:

The REGIONAL BALTIC UNDERWATER NOISE ROADMAP 2015-2017 outlines a stepwise approach for providing the necessary basis and preparation for the development of measures, including:

1. Knowledge gathering
2. Indicators
3. Explore possibility to determine acceptable levels of underwater noise for marine species
4. Evaluation and follow-up

Proposed timetable: Start in 2015

Possible steps for implementation:

The work with the Roadmap will be led by the HELCOM Expert Network on Underwater Noise, under the Pressure group.

Milestones, selected, preliminary:

- 2015: Pre-core indicator development, coordination around registry of sound
- 2016: Workshop to discuss the Roadmap
- By mid-2016: Establishment of regional registry of impulsive sound.

Responsible HELCOM subsidiary body: as outlined in the roadmap. Pressure Working Group (Expert Network on Underwater Noise), other Working Groups (Maritime WG, State and Conservation WG) to contribute on the matters of their expertise.



Baltic Marine Environment Protection Commission

Heads of Delegation
Helsinki, Finland, 10-11 December 2015

HOD 49-2015

Annex 2

REGIONAL BALTIC UNDERWATER NOISE ROADMAP 2015-2017

Background information

Anthropogenic noise has potentially harmful effects on the marine environment and the species therein.

Pressure on the marine environment from anthropogenic noise in the Baltic Sea Area needs to be addressed.

Presently piling (impulsive noise) and shipping (continuous noise) are considered to constitute the two major sources of underwater noise in the Baltic Sea, and more evidence is needed to adequately reflect the scale of the problem in the Baltic Sea.

The 2013 HELCOM Copenhagen Ministerial Declaration commits the Contracting Parties to take further measures, initiatives or efforts to reach a healthy marine ecosystem supporting a prosperous Baltic Sea region, including addressing pollution of the marine environment by litter, as well as impacts on marine organisms from underwater impulsive and continuous noise.

In the 2013 HELCOM Copenhagen Ministerial Declaration it has been agreed that the level of ambient and distribution of impulsive sounds in the Baltic Sea should not have negative impact on marine life and that human activities that are assessed to result in negative impacts on marine life should be carried out only if relevant mitigation measures are in place, and accordingly as soon as possible and by the end of 2016, using mainly already on-going activities, to

- establish a set of indicators including technical standards which may be used for monitoring ambient and impulsive underwater noise in the Baltic Sea;
- encourage research on the cause and effects of underwater noise on biota;
- map the levels of ambient underwater noise across the Baltic Sea;
- set up a register of the occurrence of impulsive sounds;
- consider regular monitoring on ambient and impulsive underwater noise as well as possible options for mitigation measures related to noise taking into account the ongoing work in IMO on non-mandatory draft guidelines for reducing underwater noise from commercial ships and in CBD context;

This roadmap will support the achievement of the commitments acquired in 2013.

There is a potential need for future revisions of the timetable indicated in this roadmap due to ongoing international, regional and European processes.

Goal

To make every effort to prepare a knowledge base towards a regional action plan on underwater noise in 2017/2018 to meet the objectives of the 2013 Ministerial Meeting, and of the EU MSFD for HELCOM countries being EU members.

Necessary steps

The following steps are perceived as necessary:

1. Knowledge gathering

- 1.1 Compile and review the available knowledge on impact of anthropogenic noise in the Baltic Sea;
- 1.2 Identify and map human activities that are the [main] sources of anthropogenic noise in the Baltic Sea;
- 1.3 Investigate and assess the significance of the sources of anthropogenic noise in the Baltic Sea from e.g. shipping, recreational vessels, ice-breaker vessels, low-frequency sonar, acoustic devices, acoustic experiments, as well as offshore construction, sand and gravel extraction, drilling, intense low or mid-frequency (Naval) sonar, underwater explosions, seismic surveys.
- 1.4 Investigate and identify sound sensitive species in the Baltic Sea in order to prioritize needed protection measures.
- 1.5 Compile information on measures to manage emissions and mitigate relevant impacts of anthropogenic underwater noise proposed and/or implemented internationally.

2. Indicators

- 2.1 Support Lead Countries in the further development of the pre-core indicator 'Continuous low frequency anthropogenic sound' towards its operationalization by taking the following necessary steps:
 - propose a concept for a regional monitoring network and propose HELCOM common monitoring guidelines based on the BIAS standards
 - develop the assessment protocol based on experiences and information available;
 - identify spatial and temporal distribution of sound sensitive species and habitats in the Baltic Sea including sensitive biological areas (spawning, nursery areas);
 - develop a concept for the GES-boundary based on the available data.
- 2.2 Support the Lead Countries in the further development of the candidate indicator 'Distribution in time and place of loud low and mid frequency anthropogenic impulsive sounds' towards its operationalization by taking the following necessary steps:
 - cooperate with OSPAR and ICES on the establishment of a joint regional registry of impulsive sound;
 - define the elements and mechanisms required for a joint regional registry of impulsive sound activities, including reporting requirements;
 - coordinate testing of the regional registry of impulsive sound activities;
 - propose a concept for determining sustainable levels of impulsive sound.

3. Explore possibility to determine acceptable levels of underwater noise for marine species

- 3.1 Based on the compilation of information on impacts of noise (1.1), investigate the possibility to use species specific tolerance to define Good Environmental Status / develop environmental targets based on common principles.

4. Evaluation and follow-up

- 4.1. Carry out a workshop with all HELCOM members to discuss the Roadmap.
- 4.2. Update the Roadmap, if necessary, in 2016 e.g. based on applicability of the measures identified under section 1.5 in the Baltic Sea area and the knowledge gathered to be a starting point for initial considerations on suitable measures to be implemented, including a cost effectiveness analysis.
- 4.3 Assess the implementation of this Roadmap in 2017.

5. Updated working timetable

Milestone	Date
Cooperate with ICES and OSPAR on the establishment of a regional registry of sound	Joint HELCOM EN NOISE, ICG Noise-HELCOM EN Noise - EU TG NOISE in September 2015
Further work on the "Distribution in time and place of loud low and mid frequency anthropogenic impulsive sounds" candidate indicator aiming at its shift to pre-core indicator and subsequently, core indicator	FI and SE informed in PRESSURE 3-2015
Further work on the "Continuous low frequency anthropogenic sound" pre-core indicator aiming at its shift to core indicator	PRESSURE 3-2015 considered
Establish a joint regional registry of impulsive noise	By Mid-2016
Workshop with all HELCOM members to discuss the Roadmap	September 2016
<ul style="list-style-type: none"> – Develop assessment protocol for ambient noise based on experiences and information available – Test the regional registry using initial data – Identify and map human activities that are the [main] sources of anthropogenic noise in the Baltic Sea 	By the end of 2016
<ul style="list-style-type: none"> – Identify spatial and temporal distribution and subsequent mapping of sound sensitive species and habitats in the Baltic Sea including sensitive biological areas (spawning, nursery areas) – Explore possibility to use species specific tolerance of underwater noise for defining GES and/or environmental targets 	Progress by September 2016, work continued into 2017
Update the Roadmap, if necessary	In 2016
Assess the implementation of this Roadmap	In 2017