Baltic Sea Roof Report

Overview of the reporting by Baltic Sea EU member states for Articles 8, 9 and 10 of the Marine Strategy Framework Directive and HELCOM's activities as the regional coordination platform

Photo: Manuel Deinhardt/Finnish Forest Service

HELCOM GEAR Group

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Introduction

The Baltic Marine Environment Protection Commission, also known as Helsinki Commission, (HELCOM), is the intergovernmental organisation governing the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)[1]. HELCOM has worked on the protection of the marine environment of the Baltic Sea for about forty years. All the countries surrounding the Baltic Sea as well as the European Union (EU) are Contracting Parties to HELCOM, striving to achieve the same goal, a good environmental status of the Baltic Sea by 2021. HELCOM agreed in 2003 on the implementation of the globally adopted ecosystem approach to the management of human activities as its main approach.

HELCOM's vision

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

The ecosystem approach forms the basis of the Baltic Sea Action Plan (BSAP) which HELCOM Ministers adopted in 2007. The BSAP and the work of HELCOM in general seek for, and ensure, synergies in implementing various global, European and national requirements, with the aim to support the Baltic Sea countries in fulfilling their obligations. The same approach is followed and has been decided regarding the EU Marine Strategy Framework Directive (MSFD, 2008/56/EC).

The HELCOM BSAP contains a set of actions to achieve a Baltic Sea in good environmental status by 2021.

For those HELCOM Contracting Parties that are EU Member States the MSFD establishes a framework within which the Member States shall take the necessary measures to achieve or maintain good environmental status of the marine environment by the year 2020 at the latest (Article 1 MSFD).

For the Russian Federation, the relevant policy document enhancing the delivery of good environmental status by 2020 is the Maritime Doctrine of the Russian Federation.

1 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), 1974, amended in 1992, and its Annexes: Annex I Harmful substances; Annex II Criteria for the use of Best Environmental Practice and Best Available Technology; Annex III Criteria and measures concerning the prevention of pollution from land-based sources; Annex IV Prevention of pollution from ships; Annex V Exemptions from the general prohibition of dumping of waste and other matter in the Baltic Sea Area; Annex VI Prevention of pollution from offshore activities; Annex VII Response to pollution accidents

Photo: Maria Laamanen

HELCOM as platform of HELCOM EU Member States for the regional coordination of the implementation of the MSFD

Common understanding and shared efforts

HELCOM Ministers have taken high interest in developing HELCOM as the environmental focal point in the Baltic Sea region and the main driving force for the implementation of the ecosystem approach. At their meeting in Moscow in 2010, HELCOM Ministers committed to establish, for those HELCOM Contracting Parties also being EU Member States, the role of HELCOM as the coordinating platform for the regional implementation of the

The four main segments of the BSAP detail goals, objectives and actions towards a Baltic Sea

- unaffected by eutrophication
- undisturbed by hazardous substances
- with environmentally friendly maritime activities
- with favourable conservation status of Baltic Sea biodiversity

HELCOM 2010 Moscow Ministerial Declaration on the implementation of the BSAP sets out common principles for continued work:

- Shared scientific understanding of the current status of the marine environment, and the predominant pressures on the status and impacts
- A common understanding of the good environmental status of the Baltic Sea to be achieved by 2021
- Joint coordinated monitoring providing the necessary data for regular state assessments and evaluation of progress towards achieving environmental objectives and targets
- A coherent and coordinated approach to developing or advising on measures

MSFD in the Baltic Sea and to strive for harmonised national marine strategies for achieving good environmental status according to the BSAP and the MSFD. HELCOM Ministers stressed that shared scientific understanding and quantification of good environmental status are to be used in policy making at the international, regional and national levels. For the practical implementation of the agreed common principles for further work (see box), HELCOM Ministers decided inter alia that a core set of indicators with quantitative targets shall be developed for each of the segments of the BSAP, while ensuring that the indicators can also be used for the other international monitoring and reporting requirements inter alia the MSFD.

HELCOM's most recent initiatives on

- core indicators for assessing environmental status and effectiveness of measures (the "CORESET" project);
- the review of the monitoring programmes (the "MORE" project);
- the further development of assessment tools and methods for thematic and holistic status assessments (HEAT, BEAT, CHASE, HOLAS)[2], and;
- the review of BSAP nutrient reduction targets (supported by the "TARGREV" and "CORE EUTRO" project)

are examples of joint efforts that not only put the BSAP into action but are also instrumental to the coherent implementation of the MSFD and its regional coordination.

Structures to facilitate coordination

The HELCOM Group for the Implementation of the Ecosystem Approach (HELCOM GEAR) was set up in 2012 as a managerial-level coordination body to steer the successful implementation of the HELCOM BSAP with a view to facilitate the regional coordination for the implementation of the EU MSFD, for those Contracting Parties that are also EU Member States, and to achieve respective coherent national marine strategies. It also needs to include coordination with activities under the Maritime Doctrine of the Russian Federation.

Preceding HELCOM GEAR, in 2009-2011, such activities related especially to the BSAP ecological objectives and the respective MSFD qualitative descriptors, indicators, and the development of targets for good environmental status. Those activities were carried out under the HELCOM Joint Advisory Board (JAB) for the HELCOM CORESET and TARGREV projects.

HELCOM GEAR works under the responsibility of HELCOM Heads of Delegation. It is to give guidance, ensure coordination of scientific and technical activities of HELCOM as well as to facilitate exchange of information on related national activities and to link the implementation of the BSAP to activities under other international frameworks, especially the MSFD for those Contracting Parties that are also EU Member States.

HELCOM GEAR is established to ensure the coherent and streamlined implementation of the ecosystem approach in such a way that it contributes to

- assessment procedures, such as those for the assessments of the status of the marine environment;
- the determination of good environmental status;
- setting of environmental targets and associated indicators;
- the development of coordinated regional monitoring programmes, and
- management measures.

In these activities, the Group will use as their foundation the BSAP and its follow-up, including nutrient reduction schemes and HELCOM Recommendations. Additional input will be provided by political commitments such as Ministerial decisions.

To meet the requirements of the 2010 Ministerial Declaration relating to HELCOM's role as the coordination platform for the regionally coherent implementation of the MSFD, it is essential for HELCOM EU Member States, that these HELCOM activities are consistent with requirements of the MSFD and with corresponding national implementation processes.

2 HELCOM Eutrophication Assessment Tool (HEAT), Biodiversity Assessment Tool (BEAT), Hazardous Substances Assessment Tool (CHASE), Holistic Assessment Tool (HOLAS).

Collaboration with Black Sea Commission & OSPAR

HELCOM has been cooperating with other regional seas in Europe both regarding the scientific basis for measures and measures themselves, e.g. regarding the protection of biodiversity, eutrophication, response to pollution at sea and the environmental impact of shipping.

At their meeting in Moscow in 2010, HELCOM Ministers emphasised the need for close cooperation with other regional marine organisations/commissions, sharing best practices and, where appropriate, aiming at harmonising decisions. They agreed for those Contracting Parties to the Helsinki Convention being also parties to other Regional Seas Conventions to further strengthen the co-operation with those commissions, in particular with a view to achieving the common goals of a healthy marine environment.

Most recently, HELCOM has show-cased interregional cooperation with the Black Sea. This has included information exchange on harmonised assessments of eutrophication and development of eutrophication indicators, and targets and assessment tools, e.g. in the EU funded project Baltic2Black.

Building on those past experiences, possibilities for enhanced cooperation with other Regional Seas Conventions exist and, when intensified, will bring additional added value to European-wide efforts to achieve healthy seas.

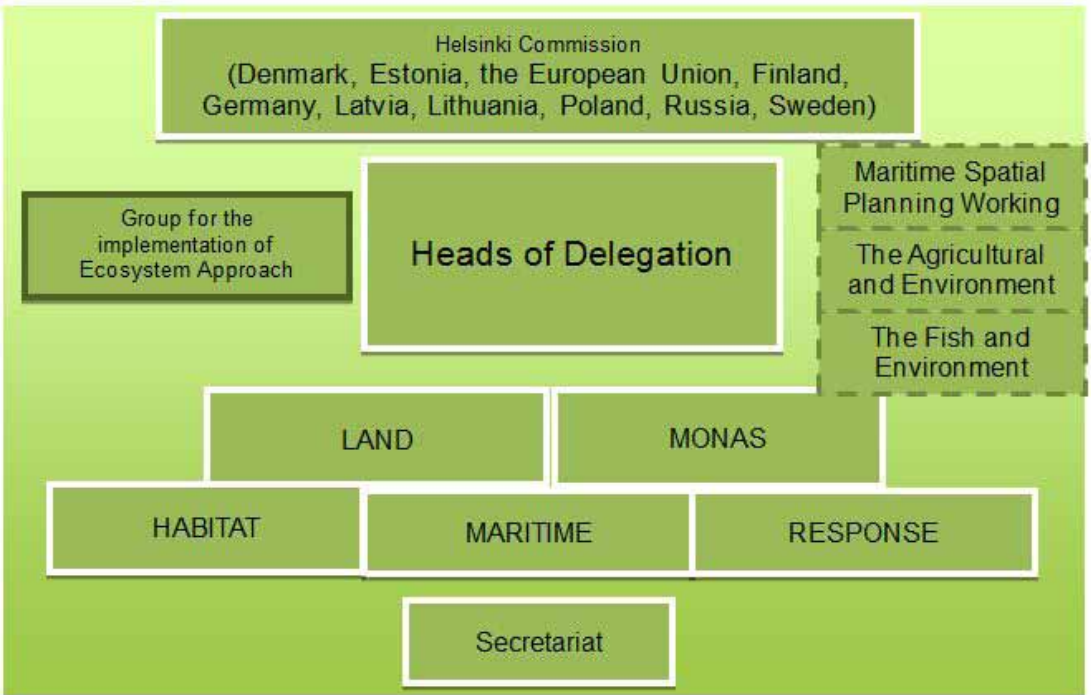
Cooperation with the OSPAR Commission to which some of the HELCOM countries are Contracting Parties is particularly important with a view to sharing best practices and, where appropriate, aiming at decisions to align approaches. Mutual invitations of OSPAR and HELCOM experts to share experience on approaches in expert groups can provide a first practical step to strengthen cooperation.

Use of HELCOM provisions by HELCOM EU Member States during the first cycle of the EU Marine Strategy Framework Directive implementation

The MSFD establishes European marine regions on the basis of geographical and environmental criteria, and the Baltic Sea is one marine region. Each EU Member State - cooperating with other Member States and non-EU countries within a marine region - are required to develop strategies for their marine waters. The situation for the Kattegat is special, as it belongs to two marine regions and Regional Seas Conventions, the Baltic Sea (HELCOM Convention) and the Greater North-Sea sub-region of the North-East Atlantic (OSPAR Convention).

In 2012, EU Member States had to produce a detailed assessment of the current state of their marine environment (Initial Assessment), define the anticipated good environmental status (GES) and to set environmental targets and associated indicators to reach or maintain GES. This will be followed by the establishment of monitoring programmes (in 2014) and a programme of measures (in 2015; entry into operation in 2016). The MSFD requires EU Member States to take account of the relevant implementation processes and activities which have been carried out pursuant to existing Community legislation, in particular pursuant to the Water Framework Directive as well as the Birds and Habitats Directives. They shall also take into account, or use as their basis, other relevant activities such as those carried out in the context of Regional Sea Conventions.

Good environmental status “shall be determined at the level of the marine region [...], on the basis of the qualitative descriptors given in Annex I” (Art. 3(5) last sub-paragraph MSFD). The Directive requires that the Member States sharing a marine region shall cooperate to ensure



that the measures required to achieve the objectives of the Directive are coherent and coordinated across the marine region. In order to achieve the coordination, the Member States shall, where practical and appropriate, use existing regional institutional cooperation structures, including those under Regional Sea Conventions, covering that marine region. In the Baltic Sea, this refers to HELCOM.

GES-REG (Good Environmental Status through Regional Coordination and Capacity Building) is a project funded by the Central Baltic INTERREG IV A Programme 2007-2013. The main aim of the project is to support coherent and coordinated implementation of the MSFD in the central and north-eastern sub-regions of the Baltic (Gulf of Finland, northern part of the Baltic Proper and Gulf of Riga). One objective of the project is to increase the knowledge base and guidance for a coherent use of descriptors, criteria and indicators in defining GES. The project offered to analyse the coherence of the implementation of Articles 8, 9 and 10 MSFD by HELCOM EU Member States and to define gaps to be filled within the regional cooperation. The following preliminary analysis is based on the responses from Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden to a questionnaire submitted by the Project to HELCOM EU Member States.

Assessing the state of the Baltic Sea (MSFD Art. 8)

Following the guidance of the document "Common Understanding on Articles 8, 9 and 10 MSFD" (the "Common Understanding Document") developed by the EU Working Group on Good Environmental Status (WG GES), all countries outlined their Initial Assessments according to Article 8 MSFD, based on the Directive's Annex III for characteristics, pressures and impacts and based on the recommendations of the EU Working Group on Socio-Economic Analysis (WG ESA) for the socio-economic analysis. Only Poland indicated that they followed a different structure.

In assessing the current status of the open sea areas, HELCOM thematic assessments of eutrophication, biodiversity and hazardous substances as well the HELCOM initial holistic assessment were used as a source of information. Status classification based on HELCOM assessment tools HEAT, BEAT, CHASE, and HOLAS was referred to. These tools have partly been applied for the first time and/or are still under development. Therefore further evaluations are needed in order to make full use of these assessments in the national implementation of the MSFD.

For the coastal waters, status assessments were mainly based on the WFD classification of ecological and chemical status.

For threatened species, the HELCOM Red List was referred in addition to the Birds and Habitats Directives assessments. For commercial fish stocks, ICES assessments were used. The HELCOM initial holistic assessment provided information on the impacts of various human pressures as well as their synergic effects.

Main gaps of the Initial Assessments relate to underwater noise and marine litter.

Due to the Baltic-wide approach of the HELCOM assessments, they were considered seldom to provide the details needed for national territorial and EEZ waters, also noting that biology differs widely in the Baltic Sea area. In the future, it is necessary to develop the HELCOM assessment products in such a way that the assessments will provide the information necessary also from national point of view, which will support the HELCOM EU Member States' obligations towards the MSFD. A specific aspect requiring further work in the development of the assessments, including HELCOM tools, is to address the need for a consistent basis for assessing the state of the environment in open waters and in coastal waters where the national WFD approaches are also applied.

Determination of good environmental status (Article 9 MSFD)

The document "Common Understanding on Articles 8, 9 and 10" developed by the EU Working Group on Good Environmental Status (WG GES) provides two alternative approaches to determine good environmental status (GES): quantitatively or qualitatively. HELCOM EU Member States used a mixture of both approaches and this is underpinned by a different understanding of, and approach to, Articles 9 (GES) and 10 (environmental targets) of the MSFD.

For determining GES according to Article 9 MSFD, countries mainly used the outline provided by Annex I of the Directive (qualitative descriptors for determining GES) and criteria of Commission Decision 2010/477/EU on criteria and methodological standards on good environmental status of marine waters. Joint work carried out in HELCOM, especially to develop indicators and associated GES boundaries for eutrophication (CORE EUTRO and TARGREV), hazardous substances and biodiversity (CORESET) were commonly referred to. GES boundaries based on WFD and food safety regulations were regularly used. Due to the lack of knowledge, not all GES descriptors have been adequately covered by quantitative GES boundaries. In order to achieve a coordinated approach to determine GES further, the joint (quantitative) determination of GES as well as the setting of operational indicators is needed within HELCOM including common standards and principles for temporal and geographical aggregation.

Denmark has developed GES by evaluating all 11 descriptors as set out in the Annex to Commission Decision 2010/477/EU. Good environmental status is described qualitatively, while environmental targets are described either qualitatively or quantitatively. The environmental targets describe either the threshold that must be exceed-

Photo: Christoff Herrmann

ed in order to move from environmental status that is not good to good environmental status, or secondary targets which can steer progress towards good environmental status.

Estonia made an extensive inventory of all available indicators according to Commission Decision 2010/477/EU. GES is defined at indicator level and a quantitative approach is used for D1, D2, D3, D4, D5, D6, D8 and D9. For operational indicators, GES thresholds and boundaries are determined. For other indicators the status of indicator development is described and gaps are highlighted. If possible, quantitative thresholds are used from other EU legislation, especially for D8 and D9.

Finland combined the approach for Articles 9 and 10 MSFD. The Finnish report is outlined according to Annex I to the MSFD and Commission Decision 2010/477/EU. Based on the alternatives in the Common Understanding document, Finland determined GES qualitatively at criteria level. Every GES has status target(s) and the aim is to determine quantitative boundaries for GES/non-GES at indicator level. If quantitative boundaries do not exist, a trend towards GES is set as the interim target. Also lack of knowledge is described. For open sea areas, boundary values determined in HELCOM and for coastal waters national boundary values determined under WFD as well as e.g. under food safety regulations are referred.

The outline of the **German** report of Article 9 follows the 11 GES descriptors. Following the Common Understanding Document, the German approach is “to determine GES under Art. 9 through both a qualitative description and using environmental thresholds/limits which quantitatively describe the desired state of the environment based on Annexes I and III (in particular Table 1) to the MSFD and Commission Decision 2010/477/EU.” Quantitative boundaries are referenced where they are available through other mechanisms (e.g. WFD, HD/BD, HELCOM, EC food safety and contaminant regulations, national provisions). Where no such GES boundaries are available, they still need to be developed. Germany indicates a need for further scrutiny or development for most indicators.

The structure of the **Latvian** Article 9 report has been formed as a set of characteristics for good environmental status on the basis of the qualitative descriptors listed in Annex I to the MSFD and relevant criteria from Commission Decision 2010/477/EU. Quantitative GES boundaries are used for the following descriptors: D1, D2, D3, D5, D6 and D9. As sources, WFD, HELCOM and national sources are mentioned.

Lithuania assessed GES and targets taking into account all indicators/criteria/descriptors defined by the European Commission and HELCOM CORESET/TARGREV. The chapters of the report follow the 11 descriptors. All indicators are assessed taking into account availability of data (information) in Lithuania and in other countries as well as the relevance of indicators for the Lithuanian marine waters. Quantitative GES boundaries are available for D1, D2, D3, D4, D5, D6, D8 and D9. Status boundaries are used from HELCOM, ICES, EU and national regulations.

Poland combined Article 9 and Article 8 reports. GES boundaries are set quantitatively except for D11. For the boundary between GES and non-GES, different sources of information were used (such as HELCOM, WFD, ICES, EU food safety regulations and national sources).

For **Sweden**, good environmental status is defined qualitatively by using the 11 descriptors as set out in Commission Decision 2010/477/EU. For each descriptor, a number of criteria are set out and defined qualitatively. Each criterion is evaluated using a number of indicators. Sweden has adopted 58 national indicators to assess the environmental status. Targets are defined for 30 of the indicators and the rest of the indicators is expected to be further developed.

Choice of environmental targets and indicators (Article 10 MSFD)

All countries used targets defined under WFD, Birds and Habitats Directives, ICES, Common Fisheries Policy and others, but also targets based on joint HELCOM work, such as CORE EUTRO and TARGREV and the HELCOM assessment tools HEAT, BEAT, CHASE and HOLAS have been referred to. The targets used are mostly qualitative (e.g. trend towards GES) and not all indicators needed are operational.

Linked to the different approaches of the Member States there is the difference in terminology about indicators and targets (i.e. thresholds) used in HELCOM and environmental targets and their associated indicators used by Article 10 MSFD. In substance this may lead to differences in target setting (e.g. with state targets outweighing operational pressure-related targets) and an overlap with GES indicators. Additional indicators (e.g. in relation to pressures and impacts) not covered by Commission Decision 2010/477/EU may be warranted. Overall, the environmental targets established under Article 10 MSFD shall “guide progress towards achieving good environmental status in the marine environment” and to this end reflect changes in state, pressures and impacts neces-

sary to achieve or maintain GES.

A joint regional development of indicators and targets for status and pressures were emphasized.

Denmark has proposed quantitative environmental targets in cases where such targets already exist (WFD, HD and BD). Quantitative targets are also used where the underlying data are sufficiently solid to support quantitative environmental targets. Qualitative environmental targets are used where the underlying data are sparse. The targets must be described at the level which represents the most relevant scale for the element that is to be described. There is therefore some variation, ranging from a limited area (e.g. a limited habitat) up to a regional scale (the size of a porpoise population).

In **Estonia**, targets are set qualitatively at criteria level using qualitative definitions of descriptors. The Article 10 report is based on the inventory of operational indicators and a list of targets defined by experts and compared with other existing obligations/targets.

Finland set "general targets" based on main human pressures and the outline follows basically HELCOM BSAP. In addition, one target is set to apply marine spatial planning. The general targets are qualitative, but HELCOM BSAP nutrient input targets are referred to. The operational targets are based mainly on existing national and international programmes. The state targets followed roughly the proposal by HELCOM TARGREV.

The **German** Article 10 report is structured along seven general targets with a set of specific operational targets which include existing national and international targets. The general targets are not strictly aligned with the GES descriptors, as this is no requirement of Article 10 MSFD. Most targets are qualitative and require further development for their quantification. Where quantitative targets are available, they are referred to. The targets relate predominantly to pressures with some targets relating to state.

The **Latvian** structure of the Article 10 report is based on the qualitative description of the GES targets relevant to the descriptors of Annex I to the MSFD and relevant criteria from Commission Decision 2010/477/EU. The report is structured in table format where the associated indicators are defined in hierarchical relevance to each GES target description and criteria. The targets are mostly qualitative, some quantitative. Targets relate to pressures and state.

The **Lithuanian** GES and targets (according to LT understanding "GES boundaries" are "targets") are assessed taking into account all indicators/criteria/descriptors defined by the European Commission and HELCOM CORESET/TARGREV. The structure of the report follows the 11 descriptors. All indicators are assessed taking into account availability of data (information) in Lithuania and in other countries and the relevance of indicators for the Lithuanian marine waters.

Poland was still preparing the Article 10 report at the time of finalising the Baltic Sea roof report.

Sweden has set 11 targets based on the main pressures identified in the initial assessment. The indicators used to evaluate the compliance with the targets are mostly the same as those used to assess the environmental status according to Article 9 MSFD. The overarching definition of good environmental status (Article 9 MSFD) and the targets with indicators (Article 10 MSFD) are implemented as environmental quality standards in Sweden.

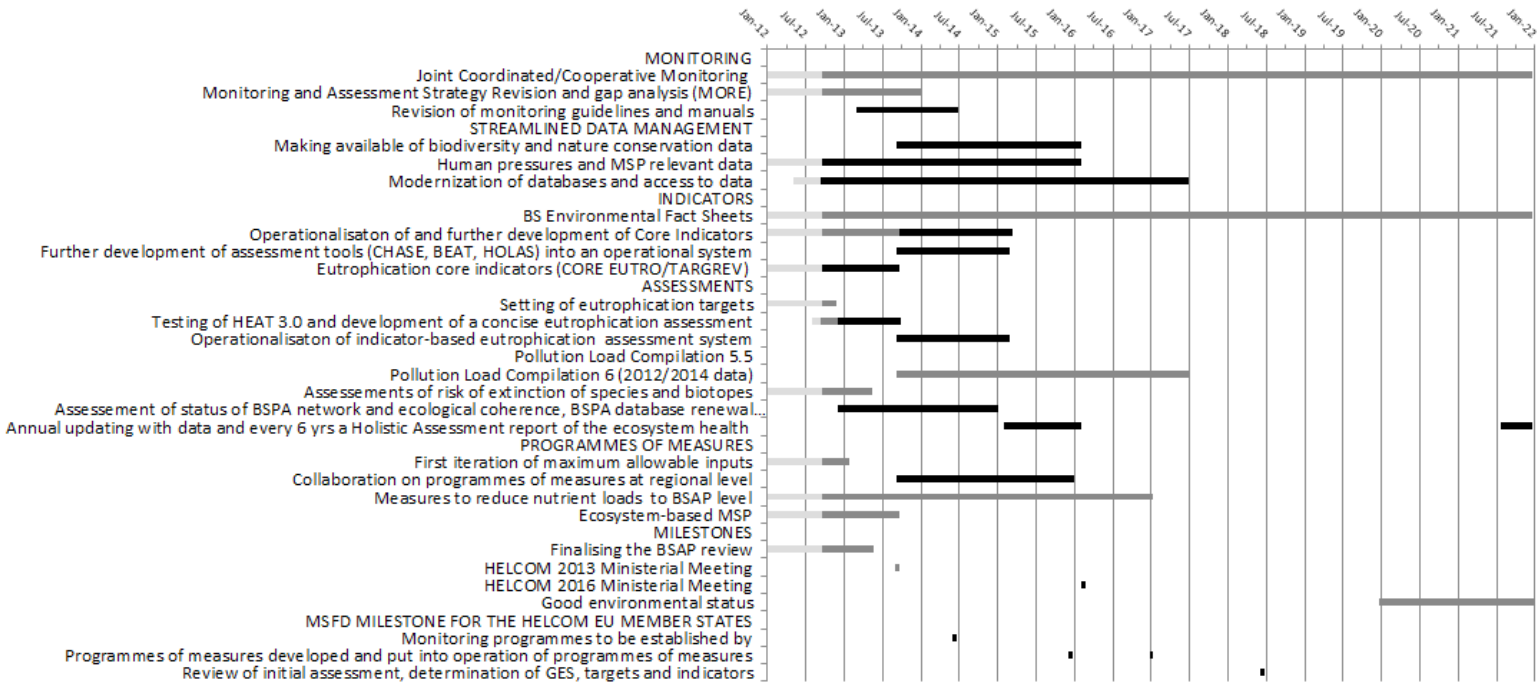
Outlook

To coordinate activities related to the MSFD for HELCOM EU Member States, HELCOM GEAR plays a major role. It has the capacity to serve as a regional instrument for the national work of the HELCOM EU Member States in implementing the MSFD. Drawing on national activities and HELCOM work, GEAR works towards region-wide co-operation on all elements of national marine strategies and takes a view across themes and sectors.

Despite the successes and considerable knowledge shared in the region, challenges remain for national efforts to meet the ambitions of the BSAP and the regional coherence required from HELCOM EU Member States under the MSFD. Work is under way to implement the HELCOM BSAP and at the same time to take cooperation on the regionally coherent implementation of the MSFD forward. The HELCOM GEAR road map under development sketches out some of the next steps. This includes continued efforts to develop current HELCOM work to meet the national requirements of HELCOM Contacting Parties, in particular those arising for EU Member States from EU Directives with the aim to achieve regionally coherent marine strategies as requested by the MSFD.

The Ministerial Meeting in 2013 provides a timely stepping-stone on the road to 2020 for the MSFD and 2021 for the BSAP to direct the further necessary actions to foster their consistent implementation. HELCOM Ministers will consider progress on the commitments that HELCOM Contracting Parties undertook in Krakow 2007 with the adoption of the Baltic Sea Action Plan and in Moscow in 2010 (Moscow Ministerial Declaration). This includes an evaluation of progress on:

- the establishment of HELCOM as the coordination platform for the regionally coherent implementation of the MSFD in the Baltic Sea
- the development of a full indicator-based follow-up system for the coherent implementation of the BSAP and at the same time the MSFD for HELCOM EU Member States
- the revision of the monitoring programmes to support indicator-based assessments
- the revision of the BSAP environmental targets for eutrophication
- the revision of the BSAP assessment tools and methods
- any additional measures required to fight eutrophication, reduce inputs of hazardous substances, improve maritime safety and halt loss of biodiversity.



Facing the challenge of regional coherence

Based on the analysis of the 2012 marine strategies of the Baltic Sea states, the jointly produced HELCOM thematic and holistic assessments as well as jointly developed indicators with boundary values for GES have provided coordinated information on relevant characteristics of the marine environment as well as on human pressures and their impacts. HELCOM EU Member States have – where applicable - used the aforementioned HELCOM products, in addition to assessments under EU legislation, in assessing the current status of the Baltic marine environment as well as in determining GES and in target-setting, including indicators.

Since the current Baltic-wide approach of the HELCOM assessments and the lack of details needed for assessing national territorial or even EEZ waters, it would be necessary to develop the HELCOM assessment products to better take into account the required level of detail and needs with respect to national work, among others, by the EU Member States towards their MSFD obligations. For that purpose the HELCOM assessment system should be reviewed and further developed, for instance, to include more interactive components that could be tailored to the needs of individual Contracting Parties.

The HELCOM assessment tools provide a good basis for aggregation of information from indicators in a harmonised way. These tools should be further developed e.g. in order to be compatible with the evolving requirements of the MSFD. In this activity, the Baltic Sea region could be a forerunner at the European level, provided that the joint assessment tools are also further developed to avoid conflicts between status classification of HELCOM and the national WFD approaches. This requires the involvement of the national WFD experts in these HELCOM activities.

Where appropriate the work carried out to develop indicators for eutrophication (HELCOM CORE EUTRO and HELCOM TARGREV) as well as for biodiversity and hazardous substances (HELCOM CORESET) has been used by HELCOM EU Member States in determining GES and setting targets and indicators. However, in order to achieve a coordinated approach to determining GES, as required by the Directive, further coordinated indicator development is required within HELCOM. The targets currently used are mostly qualitative and not all indicators needed to implement the MSFD are operational. HELCOM should facilitate the joint development of indicators and targets with regional relevance for status and pressures and of assessment methods for cumulative impacts of pressures. So far HELCOM work does not cover marine litter and underwater noise. Also the need for a coordinated approach to socio-economic analysis for the Initial Assessments should be addressed by HELCOM.

There is difference between GES/indicators for status assessment on the one hand and targets/indicators to guide progress towards GES and to evaluate effectiveness of measures on the other hand. For measures and reaching or maintaining GES, the crucial category is probably that of operational targets relating to concrete implementation measures to support their achievement. At least some of the HELCOM EU Member States will set operational targets and associated indicators when preparing their programmes of measures. HELCOM work undertaken so far could contribute to this and coordination possibilities through HELCOM should be utilised.

Despite the substantial reduction in the loads of nutrients to the Baltic Sea since the 1980s, eutrophication remains one of the biggest environmental challenges in the region, affecting most of the Baltic Sea marine area. With the TARGREV project a scientific proposal has been elaborated to review and strengthen the scientific foundation for setting coherent ecological targets for eutrophica-

tion in the region. The work builds on historical trends using also most recent monitoring data. In contrast to previous studies, it aims to account for the different sources of variations underlying the monitoring data. The resulting recommendations for setting target values for selected eutrophication indicators could provide a regionally coherent basis for HELCOM Contracting Parties to re-calculate maximum allowable nutrient inputs and revise country-wise allocations in preparation for HELCOM Ministers in 2013 to reinforce joint action to tackle eutrophication. As measures to reduce nutrient inputs need to be related to river basins and atmospheric emissions at source, HELCOM EU Member States will need to ensure that HELCOM activities are consistent with national processes in coastal waters carried out in the context of the WFD, with the current revision process of the EU National Emission Ceilings Directive (Directive 2001/81/EC) and continuation of the ongoing coordinated HELCOM action aiming at IMO to initiate action on nitrogen emissions from shipping under MARPOL 73/78.

Based on the analysis of responses by HELCOM Contracting Parties to the GES-REG questionnaire, there is a rather good regional knowledge and coordination concerning assessing status, determining GES and setting environmental targets and associated indicators for eutrophication (D5) and contaminants (D8 and D9). For contaminants, the EU Directive on Environmental Quality Standards (Directive 2008/105/EC) and the EU food safety regulations give strong coordination for the approaches of HELCOM EU Member States in selecting indicator substances and matrices as well as limit values. HELCOM cooperation has provided tools to assess biodiversity (D1) and ICES to assess commercial fish stocks. It should be emphasised, however, that all descriptors need further development and regional coordination.

Supporting monitoring of common indicators

HELCOM has long experience of joint monitoring with well-established monitoring programmes, methods, tools and practices shared by HELCOM Contracting Parties. The 2005 HELCOM Monitoring and Assessment Strategy is directed among others to coordinate monitoring activities for Baltic specific issues of concern and to produce targeted environmental assessments for specific regional management purposes. The Strategy describes respective activities aiming to reveal how visions, goals and objectives set for the Baltic Sea marine environment are met and to link the quality of the environment to management. By assessing trends in pressures, their impacts, the resulting state of the marine environment, and the effectiveness of adopted measures, HELCOM thus forms a basis for discussions, at all levels of HELCOM, on the need for additional or different measures and actions. The Ecological Objectives (EcoOs) and associated measurable indicators should be regarded as basic assessment tools linking environmental data to management decisions.

HELCOM Ministers committed in 2010 to finalising the already initiated revision of the HELCOM monitoring programmes by 2013 and to revise the HELCOM Monitoring and Assessment Strategy. The Ministers agreed that this work should

- be based on common principles, inter alia “joint coordinated monitoring providing the necessary data for regular assessment of the status of the Baltic Sea and of pressures and impacts affecting the status”
- adapt the HELCOM monitoring programmes “to support the assessing of progress towards the achievement of the environmental objectives and targets” (i.e. GES)
- result in monitoring that provides data for the indicators, which are being developed under the Baltic Sea Action Plan, “enabling the assessment and evaluation of the implementation of the jointly agreed measures”

HELCOM set up the MORE project to revise the HELCOM monitoring programmes with a view to e.g. sup-

Photo: Christoff Herrmann

Photo: Christian Hamer

porting HELCOM EU Members States to establish by 2014 regionally coordinated monitoring programmes. This work builds on the core set of HELCOM indicators initiated in 2008 and subject to finalisation for 2013, including indicators and monitoring needs arising from legally binding EU legislation. Currently, there is no specific HELCOM monitoring programme targeted at biodiversity although certain components of biodiversity are being monitored. There is also insufficient or no monitoring at national or HELCOM level for marine litter and underwater noise. These gaps need to be filled in the work leading up to 2018 in order to support future assessments of biodiversity indicators and ultimately biodiversity assessments.

Within HELCOM an integrated joint cooperative monitoring system should be further developed to provide data for the regional assessment products as defined in the HELCOM Monitoring and Assessment Strategy and added value to the HELCOM Contracting Parties, creating a capability greater than the sum of its parts.

HELCOM joint cooperative monitoring should be based on cost-efficient, quality-assured, dynamic, adaptive, operational and pragmatic coordination and sharing of monitoring activities. This can only be achieved by increasing joint initiatives such as surveys, campaigns and cruises, as well as by sharing infrastructure and using opportunities for efficiency and quality gains from specialisation of countries and national institutes.

This regionally coordinated data collection framework should support the implementation of the HELCOM Baltic Sea Action Plan, Ministerial Declarations and Recommendations. For those HELCOM Contracting Parties being also EU Member States, it supports the implementation of data collection frameworks at European level (EMODNET, GMES, SeaDataNet, WISE-Marine) as well as relevant EU Directives, such as the Marine Strategy Framework Directive and the Water Framework Directive, and the EU Data Collection Framework.

Supporting programmes of measures

Over the past decades, HELCOM has taken a wealth of measures to tackle pressure on the Baltic Sea environment. The Baltic Sea Action Plan as HELCOM's regional strategy to achieve good environmental status sets out priorities for action and provides a package of measures to address eutrophication, contaminant pollution, maritime safety and biodiversity. HELCOM Ministers in 2010 agreed on a coherent and coordinated approach to developing own recommendations, recommendations providing for harmonised implementation of the measures imposed by other international organisations as well as proposals to other international organisations necessary to achieve good environmental status, ensuring full cooperation of HELCOM Contracting Parties.

HELCOM has proven successful as regional platform to facilitate coherent action and offers measures, tools and mechanisms instrumental for national programmes of measures to be prepared by the HELCOM EU Member States under the MSFD. This includes the proven capacity of HELCOM

- to link with and take a pro-active role in other international processes, including on global level, for which the initiative within IMO for a Baltic Sea Special Area under MARPOL Annex IV and the involvement in the UNECE LRTAP revision process of the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone stand examples;
- to agree and adopt – as was done e.g. by the Baltic Sea Action Plan – own regional regulations and measures as well as recommendations for national measures, leading to implementation either through national legislation or projects and activities;
- to integrate key sectors and stakeholders in policy making through observership to HELCOM as well as specific inter-sector groups and platforms, such as the HELCOM-VASAB Working Group on Maritime Spatial Planning, the Baltic Agriculture and Fisheries Environmental Forums or the Stakeholder Platform for port reception facilities.

HELCOM's work provides a sound common basis for all its Contracting Parties to take the necessary measures, and also for HELCOM EU Member States to meet the requirement of the MSFD to establish by 2015 and implement by 2016 regionally coordinated and coherent programmes of measures to achieve or maintain good environmental status of their marine waters. HELCOM Ministers in 2013 will evaluate progress to date in implementing the Baltic Sea Action Plan based on regular reporting of National Implementation Plans and will decide on the adoption of additional measures, as needed, to support common action by Contracting Parties to achieve a healthy marine environment.

Key Messages

HELCOM work in general and the HELCOM Baltic Sea Action Plan in particular have provided a framework for all states bordering the sea to work on defining, and progressing towards, good environmental status of the Baltic Sea, including for HELCOM EU Member States to support coordination of their initial steps in implementing the EU Marine Strategy Framework Directive. Challenges remain as follows:

- HELCOM EU Member States follow different approaches to Articles 9 and 10 MSFD. Currently under both provisions emphasis is given to indicators and targets defining GES and assessing state. Continued cooperation should bring proposals for better defined pressure targets and indicators, especially operational targets linking to measures, into focus for a regionally coherent approach.

- HELCOM EU Member States rely on the definition of GES, indicators and targets already set out under existing EU, national and HELCOM commitments. Additional effort is required to ensure that regional approaches to assessing and classifying state, setting environmental targets, monitoring and developing programmes of measures are consistent with the various commitments of Contracting Parties, including those of EU Member States under the Water Framework Directive, Habitats Directive and Birds Directive.

- In support of their initial assessments under Article 8 MSFD, HELCOM EU Member States made use of the results of
    - implementation processes carried out pursuant to EU legislation, in particular the Water Framework Directive and the Habitats and Birds Directives.
    - recent thematic and holistic HELCOM assessments. While HELCOM assessment tools respond well to the requirements of the MSFD for statements at the scale of the Baltic Sea region, more emphasis should be given in the future to less aggregated information in support of national needs of HELCOM EU Member States to assess their waters at smaller scales (coastal waters, EEZ).

- Regional coherence is best, but not yet fully, developed for eutrophication and hazardous substances. Regional coherence is least developed for biodiversity, food webs and non-indigenous species given gaps in knowledge and methodologies. Marine litter and underwater noise are currently not adequately covered at national or regional level.

- HELCOM work on a set of common core indicators for assessing state of the marine environment has been used by HELCOM EU Member States. More work is needed to close gaps e.g. for litter and noise, and to further develop biodiversity indicators. Progress on regionally common indicators is vital to informing the development of appropriate monitoring programmes.

Drawing on this initial overview of national approaches HELCOM EU Member States will cooperate, using HELCOM as a platform for such cooperation, to deepen its analysis of regional coherence with a view to providing input to the HELCOM Ministerial Meeting in 2013 as part of a detailed programme of work required to facilitate and further improve coordination and coherence in the region for the purposes of the MSFD and the BSAP and to take forward next steps in the regional coordination of monitoring and programmes of measures.

Photo: Manuel Deinhardt/Finnish Forest Service

Abbreviations

BD	EU Birds Directive
BEAT	HELCOM Biodiversity Assessment Tool
BSAP	HELCOM Baltic Sea Action Plan
CFP	EU Common Fisheries Policy
CHASE	HELCOM Hazardous Substances Assessment Tool
CORE EUTRO	Development of HELCOM Core Indicators for Eutrophication (HELCOM project)
CORESET	Development of HELCOM Core Set Indicators (HELCOM project)
EEZ	Exclusive Economic Zone
EU	European Union
GEAR	HELCOM Group for the Implementation of the Ecosystem Approach
GES	Good Environmental Status
GES-REG	Coherent and coordinated implementation of Marine Strategy Framework Directive in the central and north-eastern sub-regions of the Baltic Sea(HELCOM project)
HABITAT	HELCOM Nature Protection and Biodiversity Group
HD	EU Habitats Directive
HEAT	HELCOM Eutrophication Assessment Tool
HOLAS	HELCOM Tool for the Holistic Assessment of Ecosystem Health Status
ICES	International Council for the Exploration of the Sea
INTERREG IV	European Territorial Cooperation programme under the European Regional Development Fund
JAB	HELCOM Joint Advisory Board
LAND	HELCOM Land-based Pollution Group
LRTAP	UNECE Convention on Long-range Transboundary Air Pollution
MARITIME	HELCOM Maritime Group
MONAS	HELCOM Monitoring and Assessment Group
MORE	Revision of the HELCOM Monitoring Programmes (HELCOM project)
MSFD	EU Marine Strategy Framework Directive
RESPONSE	HELCOM Response Group
TARGREV	Review of the ecological targets for eutrophication of the HELCOM BSAP (HELCOM project)
UNECE	United Nations Economic Commission for Europe
VASAB	Vision and Strategies around the Baltic Sea
WFD	EU Water Framework Directive
WG ESA	EU Working Group on Socio-Economic Analysis as part of the EU MSFD Common Implementation Strategy
WG GES	EU Working Group on Good Environmental Status as part of the EU MSFD Common Implementation Strategy