

Basing a regional Action Plan on the eco-system approach to address water quality – Baltic Sea

1. Policy Objective & Theme

- ADAPTATION TO RISK: Preventing and managing natural hazards and technological (human-made) hazards
- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE ECONOMIC GROWTH: Developing Europe's regional seas sustainably

2. Key Approaches

- Participation
- Socio-economic

3. Experiences that can be exchanged

The HELCOM Baltic Sea Action Plan is an ambitious programme to restore good ecological status of the Baltic marine environment by 2021. It is pioneering the application of the ecosystem approach.

4. Overview of the case

HELCOM have introduced an ambitious Action Plan with a clear set of ecological objectives in order to reach a defined healthy marine environment with defined targets.

5. Context and Objectives

a) Context

The Baltic Sea is an almost landlocked sea and one of the largest bodies of brackish water in the world. It holds unique and fragile ecosystems with naturally low numbers of species which are all highly sensitive to pollution. The greatest problems are eutrophication, hazardous substances and maritime transport with e.g. algal blooms, oiled sea-beds, and depletion of fish stocks. The Helsinki Commission, or HELCOM, is the governing body of the "Convention on the Protection of the Marine Environment of the Baltic Sea Area" (the Helsinki Convention). The 1974 Convention entered into force on 3 May 1980 and, in the light of political changes, a new convention was signed in 1992 by all the states bordering the Baltic Sea as well as the European Community. After ratification the Convention entered into force on 17 January 2000. It works to protect the marine environment of the Baltic Sea from all sources of pollution through inter-governmental co-operation between Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden. The Baltic Sea Action Plan was completed and adopted in 2007 by the ministers of the environment of the party states. It is a first ever attempt by a regional seas convention to incorporate an innovative ecosystem-based approach into the protection of the marine environment.

b) Objectives

The strategic goal of HELCOM is to have maritime activities in the Baltic Sea carried out in an environmentally friendly way. The Action Plan is to ensure that all possible measures are taken to reduce pollution in the Baltic Sea and to repair the damage done to the marine environment.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The working structure of HELCOM, supported by the Secretariat, consists of the meetings of the Helsinki Commission, the Heads of Delegation, and its five main groups viz. the Monitoring and Assessment Group (HELCOM MONAS), the Land-based Pollution Group (HELCOM LAND), the Nature Protection and Biodiversity Group (HELCOM HABITAT), the Maritime Group (HELCOM MARITIME) and the Response Group (HELCOM RESPONSE).

b) ICZM tools

The Baltic Sea Action Plan addresses all the major environmental problems affecting the Baltic marine environment. It is radically different from any other plan or programme previously undertaken by HELCOM. The innovative approach is that it is based on a clear set of 'ecological objectives' defined to reflect a jointly agreed vision of 'a healthy marine environment, with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable human activities'. Example objectives include clear water, an end to excessive algal blooms, and viable populations of species. Targets for 'good ecological status' are based on the best available scientific knowledge. The timeframe for reaching these targets is a political decision. With the application of the ecosystem approach, the protection of the marine environment is no longer seen as an event-driven, pollution reduction approach to be taken sector-by-sector. Instead, the starting point is the ecosystem itself, and a shared concept of a healthy sea with a good ecological status. This vision will determine the need for further reductions in pollution loads, as well as the extents of various human activities. The cross-sectoral plan identifies the specific actions needed to achieve agreed targets within a given timeframe for the main environmental priorities: combating eutrophication, curbing inputs of hazardous substances, ensuring maritime safety and response capacity to accidents at sea, and halting habitat destruction and the ongoing decline in biodiversity.

The following ecological objectives have been set:

Eutrophication: concentrations of nutrients close to natural levels; clear water; natural level of algal blooms; natural distribution and occurrence of plants and animals; and natural oxygen levels. To do so means agreeing e.g. action on the maximum allowable inputs by 2016 and to reduce the nutrient load from waterborne and airborne inputs aiming at reaching good ecological and environmental status by 2021. Transboundary pollution originating in Belarus and Ukraine requires joint activities.

Hazardous substances: concentrations of hazardous substances close to natural levels; all fish safe to eat; healthy wildlife and radioactivity at pre-Chernobyl level. To do so means agreeing e.g. a ban or restriction on the use of identified relevant hazardous substances or substance groups; and substitution of the selected hazardous substances with less hazardous substances.

Maritime transport: enforcement of international regulations; no illegal discharges; efficient emergency and response capability; minimum sewage pollution from ships; and zero discharges from offshore platforms. To do so means as of 1st January 2010 no ships calling at a port in the Baltic Sea area may use organo-tin compounds, the availability of adequate reception facilities for ship generated wastes; and mandatory delivery of waste and the application of the "no-special-fee" system in all the Baltic Sea ports.

Biodiversity: restoring and maintaining sea floor integrity at a level that safeguards the functions of the ecosystems; habitats, including associated species, show a distribution, abundance and quality in line with prevailing physiographic, geographic and climatic conditions; and a water quality that enables the integrity, structure and functioning of the ecosystem. To do so means broad-scale, cross-sectoral, marine spatial planning principles based on the Ecosystem Approach jointly developed by 2010, as well as tested, applied and evaluated by 2012.

Many of the Baltic's environmental problems are proving difficult to solve, and it could take several decades for the marine environment to recover. Concerning inputs of nutrients which are responsible for eutrophication, HELCOM has already achieved a 40% reduction in nitrogen and phosphorus discharges (from sources in the catchment area) and likewise a 40% decrease as regards emissions of nitrogen to the air, as well as halving the total discharges of about 50 hazardous substances. But in order to achieve "clear water" phosphorous and nitrogen inputs to the Baltic Sea must be further cut by about 42% and 18%, respectively. Such reductions, however, cannot be achieved using only the old administrative measures of equal reductions in pollution loads. A completely different approach and new tailor-made actions are required to reach the goal of good ecological status. Moreover, the remaining challenges are more difficult than earlier obstacles. Reductions in

nutrient inputs have so far mainly been achieved through improvements at major point sources, such as sewage treatment plants and industrial wastewater outlets. Achieving further reductions will be a tougher task, requiring actions to address diffuse sources of nutrients such as run-off from over-fertilised agricultural lands.

7. Cost and resources

No costings have been provided with this ambitious plan although a cost benefit analysis of projects, including the cost of non-action and a unit abatement cost calculation, are recognised as the basis when deciding upon implementation. It should be noted that an environmental programme delineated in 1992 was estimated at €18 billion for the following twenty years.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The environmental status of the Baltic Sea has been enhanced in several respects during the last decade. Emissions of nutrients from point sources have been significantly reduced, as have releases of organo-halogen compounds (e.g. dioxins and furans), leaded petrol is being phased out in the whole region, and joint environmental monitoring is becoming more efficient and reliable. Visible improvements such as re-opened bathing beaches and the recovery of white-tailed eagle and seal populations have been important in order to ensure future political support of the measures taken. This influence has primarily been achieved not through convention texts or institutional strength, but rather due to its ability to successfully shape the regional environmental agenda, to formulate when urgent action is needed and to suggest remedies. These initiatives have been based on scientific evidence produced in HELCOM member countries.

9. Success and Fail factors

The active participation of all major stakeholder groups in the region has been very important to ensure that the plan is relevant and can be effectively implemented. The successes achieved to date are directly related to sustained political commitment and the broad-based public support it has received. This is due to the development of a strong series of partnerships between HELCOM, the European Community, regional organisations, cooperating countries, local governments, international financial institutions, bilateral donor organisations, academic and applied research institutions, non-governmental organisations, private sector interests and a large number of individual citizens.

10. Unforeseen outcomes

HELCOM received the Swedish Baltic Sea Water Award 2009 to recognise the direct and practical efforts to improve the water quality of the Baltic Sea. The EC has described HELCOM's plan as a cornerstone for further action in the Baltic Sea region, emphasising that the plan is instrumental to the successful implementation of the proposed EU Marine Strategy Directive in the region. However, the Plan is not without its critics with BirdLife Finland raising concern that oil pollution has been overlooked and WWF that the Plan is a watered-down version due to political compromise.

11. Prepared by

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12. Verified by

It has not been possible to verify this case.

13. Sources

- First GEF Biennial International Waters Conference (2000), Session IV Lessons of Experience - Longstanding Multi-country Institutions Plenary Session U. Kremser, Helsinki Commission, Budapest, Hungary
- HELCOM Baltic Sea Action Plan (2007) HELCOM

- Protecting the Baltic Sea: The Helsinki Convention and National Interests (2003), B. Hassler in O. Schram Stokke and Ø. B. Thommessen (eds.), Yearbook of International Co-operation on Environment and Development 2003/2004 (London: Earthscan Publications), 33-41.
- The Baltic Sea Action Plan A new environmental strategy for the Baltic Sea region (undated) Helsinki Commission
- www.helcom.fi

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-  Baltic Sea Action Plan Final (462.98 KB) 
 -  First GEF biennial international waters conference (26.88 KB) 
 -  Protecting the Baltic SEa (145.2 KB) 
 -  The Baltic Sea Action Plan a new environmental strategy (2 MB) 
 -  bsep122 (3.27 MB) 