Protection of the Marine Environment of the Baltic Sea—An Example on Multilateral Co-operation

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The Convention on the Protection of the Marine Environment of the Baltic Sea Area - the Helsinki Convention - entered into force in May 1980 and thus the Baltic Marine Environment Protection Commission - the so-called Helsinki Commission (HELCOM) - has already reached the age of ten years. This account of the intergovernmental co-operation on the protection of the Baltic Sea includes the content of the Convention and the organizational structure of the Commission. Experiences gained so far together with effects of actions on the state of marine environment and needed development in future are expressed.

Helsinki Convention

The Convention on the Protection of the Marine Environment of the Baltic Sea Area was concluded on the initiative of Finland. This so-called Helsinki Convention, which was signed in 1974, is the first comprehensive convention on the protection of the marine environment. It takes into account all sources of marine pollution, i.e. land-based pollution (including airborne pollution), forbids dumping, sets strict regulations for vessels, and calls for cooperation in combatting oil and other harmful substances, as well as for co-operation in the fields of science and technology. Even though the Convention does not cover the internal waters, the principles of it are applied also to these waters. The Convention entered into force in May 1980 having been ratified by all seven coastal states (Denmark, Finland, the German Democratic Republic, the Federal Republic of Germany, Poland, Sweden and the Union of Soviet Socialist Republics. The Convention includes 29 Articles and 6 Annexes which form an integral part of the Convention.

For the purposes of the Convention "the Baltic Sea Area" consists the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57°44.8'N. Although the internal waters of the Contracting Parties (CP's) do not belong to the Convention Area, each CP undertake to ensure that the purpose of the Convention will be obtained in these waters, too.

According to the fundamental principles and obligations (Article 3) "the CP's shall individually or jointly take all appropriate legislative, administrative or other relevant measures in order to prevent and abate pollution and to protect and enhance the marine environment of the Baltic Sea Area". Implementation of the present Convention is not allowing to cause an increase in pollution of sea areas out the Baltic Sea Area.

As the most stringent obligation (Article 5), "the CP's undertake to counteract the introduction, whether airborne, waterborne or otherwise, into the Baltic Sea Area of hazardous substances as specified in Annex I". The present Annex I contains DDT and its derivatives, PCP's and PCT's.

The principles and obligations for reduction of landbased pollution are formulated in Article 6 as follows:

- 1."The CP's shall take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area".
- 2."In particular, the CP's shall take all appropriate measures to control and strictly limit pollution by noxious substances and materials in accordance with Annex II".
- 3."The substances and materials listed in Annex II shall not be introduced into the marine environment of the Baltic Sea Area in significant quantities without a prior special permit, which may be periodically reviewed, by the appropriate national authority".

In addition to the list of noxious substances the Annex II defines that "the CP's shall endeavour to use best practicable means to prevent harmful substances and materials from being introduced as airborne in the Baltic Sea Area".

Goals, criteria and measures concerning the prevention of land-based pollution by harmful substances are specified in Annex III. These concern treatment of municipal waste waters, processing and treatment of industrial wastes, and thermal pollution.

Prevention of pollution from ships is based on the Article 7 according to which "in order to protect the Baltic Sea Area from pollution by deliberate, negligent or accidental release of oil, harmful substances other than oil, and by the discharge of sewage and garbage from ships, the CP's shall take measures as set out in Annex IV".

According to Article 8 "the CP's shall, in addition to implementing those provisions of the Convention which can appropriately be applied to pleasure craft, take special measures in order to abate harmful effects on the marine environment of pleasure craft activities. The measures shall inter alia deal with adequate reception facilities for wastes from pleasure craft".

In addition of total prohibition of dumping in the Baltic Sea Area, dumping of dredged spoils demands a prior special permit by the appropriate national authority in accordance with the provisions of Annex V.

Co-operation in combatting marine pollution is determined in Article 11 as an obligation of the CP's to "take measures and co-operate as set out in Annex VI of the present Convention in order to eliminate or minimize pollution of the Baltic Sea Area by oil and other harmful substances".

Organization

The Helsinki Commission has a permanent international Secretariat in Helsinki. The Office and the Privileges and Immunities of the Commission are defined by the Headquarters Agreement between the Commission and the Government of Finland. The members in the professional category of the Secretariat are the Executive Secretary, the Environment Secretary, the Technological Secretary and the Maritime and Combatting Secretary.

The organization chart indicates that the Commission has four permanent Committees and two <u>ad hoc</u> working groups as its subsidiary bodies. Under the Committees there are several permanent or <u>ad hoc</u> working groups. The work is remarkably supported also by informal meetings, workshops, seminars and symposia for specific topics. The main tasks of the Committees are to advice the Commission in matters related to their mandates.

The Environment Committee (EC) advises the Commission on matters related to monitoring the quality of marine environment (sea water, biota, sediment) and evaluating the state of the sea. The Committee also coordinates programmes concerning collection and evaluation of data on airborne pollution and radioactive substances. For these purposes the expert groups for airborne pollution (EGAP), for matters related to radioactive substances (MORS) and for preparation of the Second Periodic Assessment of the State of the Baltic Sea (GESPA) have been established.

The Technological Committee (TC) advises the Commission on matters related to programmes for collection of data on discharges to the Baltic Sea, review of the status of data and elaboration of methods, models and techniques to reduce the discharges to the sea. The permanent working group for reduction of industrial discharges (RID) and several workshops and seminars hosted by the Baltic Sea States assist the work of the Committee.

The Maritime Committee (MC) advises the Commission on matters relating to the prevention of pollution from ships including relevant aspects of safety of navigation as well on the abatement of harmful effects on the marine environment of pleasure craft activities.

The Committee should further provide for the coordination of efforts of the CP's in the work of other international organizations, in particular the International Maritime Organization (IMO), with a view to enhancing the protection of the marine environment of the Baltic Sea Area.

The Combatting Committee (CC) advises on matters relating to the combatting of the marine environment of the Baltic Sea Area. The Committee further facilitates the direct contact and cooperation between the competent authorities dealing with oil pollution combatting matters. It should also develop suitable routines for cooperation

in operational matters with the competent authorities acting under other international agreements of relevance to the combatting of marine pollution of the Baltic Sea Area.

As to the two <u>ad hoc</u> groups under the Commission, the LEX group should advise on legal issues submitted for its consideration and the GRC group has been given the task to consider necessary amendments to the Convention in order to bring the Convention with its Annexes in line with the development since 1974.

Decisions and actions of the Commission

The decisions of the Commission can be divided into three categories. The first one consists internal decisions on routine action of the Commission such as rules of procedures, personnel, financing and action programmes. The second category includes recommendations on measures relating to reduction of pollution or to fulfillment of joint monitoring and action programmes. To the third category belong recommendations of the Commission concerning amendments to the Annexes of the Convention.

In practice for protection of the Baltic Sea Area the most important decisions are those concerning reduction of emissions of harmful substances from different sources, so-called HELCOM Recommendations. During the last ten years the Commission has adopted 30 Recommendations concerning reduction of pollution load entering the Baltic Sea from land-based sources, i.e. DDT, PCB's, PCT 's, oil, mercury, cadmium, treatment of municipal sewage and industrial waste water, discharges from agriculture, pulp and paper industry, iron and steel industry and chemical industry. The Commission has also adopted 42 Recommendations in the maritime field and 17 Recommendations in the combatting field.

In addition to the regular reporting on implementation of Recommendations, the CP's have monitored the state of the Baltic Sea Area by the coordinated Baltic Monitoring Programme (BMP) since 1979. This data has been used for evaluations of the state of the Baltic Sea, published as a background evaluation in 1980, and as the First and Second Periodic Assessment in 1987 and in 1990. The CP's shall prepare national evaluations of the state of coastal waters for consideration of the Commission in 1992.

A monitoring programme on airborne pollution was started in 1986 and in 1987 a monitoring programme for radioactive substances. In 1986 the Commission started also to compile data on the load of pollution entering the marine environment from land-based sources, published in 1987. During this year updated data on discharges from urban areas, industry and rivers will be collected for the Second Pollution Load Compilation.

Ministerial Declaration 1988

The Ministers of the Baltic Sea States responsible for the environmental protection, being worried about the state of the Baltic Sea, adopted and signed during the ninth meeting of Helsinki Commission in 1988 the Declaration on the Protection of the Marine Environment of the Baltic Sea Area. In this document the Ministers declared, inter alia, their firm determination to reduce substantially heavy metals, toxic or persistent organic substances and nutrients in the order of 50% out of the total discharges in 1987 of each of them as soon as possible but not later than 1995.

State of the Baltic Sea

According to the Second Periodic Assessment on the state of the Baltic Sea positive changes in the marine environment of the Baltic Sea have been observed, for example, the low level of DDT and PCB in biota, owing to a ban in use of these substances in all the Baltic Sea States. Another is the general decrease of lead concentrations detected in the Kattegat and the Belt Sea, possibly as an effect of the increase use of unleaded gasoline in the countries in the western Baltic Sea. The metal concentrations in the biota in the open Baltic waters, especially mercury, do not differ significantly from those of the North Sea and North-East Atlantic. In many areas the strong increase of phosphorus and nitrogen concentrations observed in the seventies has stopped, with the exception of the Kattegat and the Gulf of Riga. The values are, however, on such a high level that they still cause increasing biological production causing harm to the ecosystem.

Negative changes indicated in the recent evaluation include an increasing number of identified organic substances, which are potentially harmful to the environment. Concentrations of organochlorines in fish in the Baltic Proper are still three to ten times higher than in catches from eastern Atlantic. In the Kattegat and the Belt Sea algal blooms have occurred more frequently and primary production has doubled in the past 25 years. In the southern Baltic Sea low oxygen concentrations have had a serious impact on benthic animals and consequently on fishing.

A characteristic of the Baltic Sea during the last ten years is the continuously decreasing salinity due to lack of major inflows of saline water from the North Sea during 13 years. The current stagnation period is the largest and the most serious one recorded in this century in the eastern Gotland Basin. Here also oxygen concentrations have continuously decreased and hydrogen sulphide concentrations are at highest level ever measured. However, in the whole Baltic in general, the area with insufficient oxygen conditions for benthic animals, i.e., in the Central Baltic Sea and the Gulf of Finland has fluctuated but not increased for 25 years.

Future Activities

The state of the Baltic Sea today is definitively better than would have been without the many efforts and concrete joint, bilateral and individual measures by the Baltic Sea States. However, a lot is still to be done and therefore, on the initiative of Finland, the Commission decided in February 1990 to established the <u>ad hoc</u> group for revision of the Convention (GRC). The group should consider the necessary amendments in order to bring the Convention with Annexes in line with the development since 1974.

Introduction of more legally binding rules and stringent measures in the field of prevention and control of pollution is useful only if such rules would speed up and facilitate the national implementation of Commission Recommendations to the Governments of the CP's. As to more stringent measures the inclusion of the principle of application of the best available technology and the precautionary principle and action into the Convention would be of great importance. The need to include internal waters in the Convention Area is evident because the Convention is dealing with protection measures and that pollution is mainly transmitted through the internal waters to the present Convention Area.

For rapid reduction of pollution entering into the Baltic Sea the main problem is not the lack of binding decisions but in most cases the lack of resources, and to some extent the lack of political will. Due to limitations of resources available for application of best available technology and best environmental practice, the most acute measures must be focused by international co-operation on the most polluting sources simultaneously with the updating of the present Convention.

Finnish Water Protection Programme

In Finland both the HELCOM Recommendations and the Ministerial Declaration have been taken into account in the Decision-in-Principle for Water Protection Programme to 1995 issued by the Finnish Council of State in October 1988. Although the objectives spring from Finland's need to reduce loading of its own watercourses and coastal waters, the loading of the Baltic Sea and its Gulfs will also be reduced by an amount sufficient Finland's international commitments. Finland has no special action plan for protection of coastal waters and sea areas because the Water Act is valid for both inland and sea waters. The Act is based on case by case consideration of permits granted by the Water Courts for polluters and therefore it offers good possibilities also for special protection of sea waters, when so needed. The judicial bases for the use of coastal and sea waters are specially set out in the Act on the prevention of Marine Pollution.



