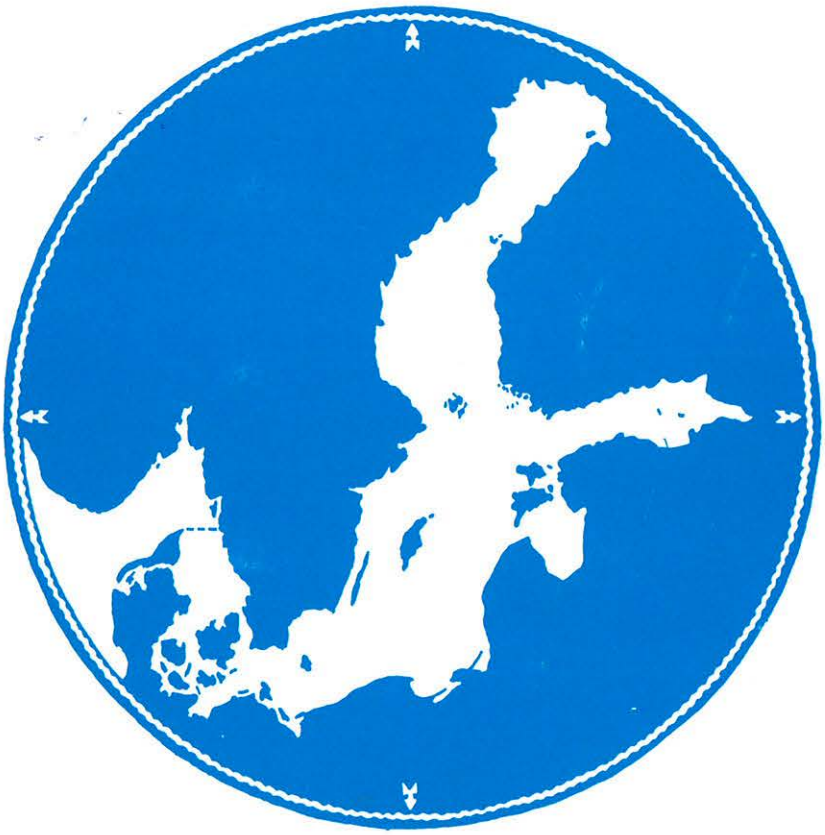
BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 33

ACTIVITIES OF THE COMMISSION 1989

Including the Eleventh Meeting of the Commission
held in Helsinki 13—16 February 1990



BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION
– HELSINKI COMMISSION –

BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 33

ACTIVITIES OF THE COMMISSION 1989

Report on the activities of the Baltic Marine Environment Protection Commission during 1989 including the Eleventh Meeting of the Commission held in Helsinki 13—16 February 1990

HELCOM Recommendations passed during 1990

BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION
— HELSINKI COMMISSION —

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REPORT ON THE ACTIVITIES OF THE COMMISSION DURING 1989 INCLUDING THE ELEVENTH MEETING OF THE COMMISSION HELD IN HELSINKI 13-16 FEBRUARY 1989

1. ACTIVITIES OF THE COMMISSION DURING 1989

1.1 Tenth Meeting of the Commission

During the tenth year of operation of the Baltic Marine Environment Protection Commission - Helsinki Commission (HELCOM) the elaboration of further measures against pollution was continued with special emphasis on the follow-up of the Ministerial Declaration adopted at the ninth meeting of the Commission.

The outcome of the tenth meeting of the Commission held in Helsinki 14-17 February 1989 has been published in the Baltic Sea Environment Proceedings No.29.

Detailed information on the progress made since the tenth meeting of the Commission in the different substantive activities within the framework of the Helsinki Commission is given in the subsequent paragraphs.

1.2 Scientific-Technological Committee (STC)

The 16th meeting of the Scientific-Technological Committee (STC) was held in Sopot, Poland, 23-27 October 1989. Delegations from all the Contracting Parties attended the meeting. An observer from the International Council for the Exploration of the Sea (ICES) and an Observer from the International Maritime Organization (IMO) as well as the Executive Secretary, Mr. Fleming Otzen also attended the meeting. An Observer from Greenpeace International attended the meeting and gave a statement in the beginning of the meeting and participated in the discussions on the statement according to the Rules of Procedure (HELCOM 10/14, Paragraph 8.24).

Mr. Piotr Krzyzanowski of the Polish People's Republic, the Chairman of the STC, acted as Chairman of the meeting. Mr. Ain Lääne of the USSR and Mr. Tapani Kohonen of Finland, acted as Vice-Chairmen of the meeting. The Scientific Secretary of the Commission, Ms. Terttu Melvasalo, and the Technological Secretary, Mr. Vassili Rodionov, acted as Secretaries of the meeting.

The Contracting Parties reported to the meeting on their scientific and administrative activities with special attention to plans and action taken in order to implement the Ministerial Declaration adopted by the Commission at its ninth meeting in February 1988, as well as the associated HELCOM Recommendations. The ICES Observer informed the meeting on the activities of ICES pertinent to the work of STC, and especially on the progress of activities requested by the Helsinki Commission. The Observer of IMO informed the meeting on relevant activities within IMO. The Observer of Greenpeace delivered a statement followed by discussion by the meeting, which expressed the wish that Greenpeace should cooperate on better prepared grounds and thoroughly checked facts in the future.

Baltic Monitoring Programme (BMP) and assessments

The STC was informed on the state of the HELCOM Data Bank and on the submission of data. The Committee also considered questions related to cruise plans, cruise reports, intercalibration exercises as well as the work of the Working Group on Microbiology. The meeting further considered the action taken

and planned by the joint group GESPA, established for the preparation of the Second Periodic Assessment on the State of the Marine Environment of the Baltic Sea, which is expected to finalize its work in 1990. The Committee further felt that it could be valuable if a brochure would be prepared as well as a map including information on the whole drainage area of the Baltic Sea.

Monitoring of radioactive substances

The Committee received information on the progress of the work within the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (MORS) and the cooperation with the International Atomic Energy Agency (IAEA). The meeting was also informed on the recent reporting of environmental data as well as release data on radioactive substances.

The STC endorsed the proposals by the group MORS, e.g. concerning its future plans. In addition to the outcome of the seminar held in conjunction with MORS 4 dealing with the status on the radiation situation in the Baltic Sea since 1986, published by the Commission in 1989, the Inventory of Radionuclides from the Chernobyl Accident is proposed to be published after final approval by MORS 5.

Airborne Pollution

The Committee considered the report of the sixth meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EGAP). The meeting noted with appreciation that cooperation with the UN Economic Commission for Europe (ECE) had been intensified and working arrangements were established with ECE EMEP data centre Chemical Coordinating Centre (CCC), and endorsed the proposals made by the group e.g. concerning future cooperation with all ECE EMEP centres.

The Committee was also informed on the submission of data as well as the status of data bases established for the HELCOM airborne pollution data, hosted by ECE using EMEP facilities and the data base established for emission data, hosted by DORNIER in the Federal Republic of Germany.

The meeting considered e.g. the state of the intercomparisons and intercalibrations, plans for relevant workshops and publishing of the results of the intercalibration exercises. The Committee decided to submit a draft HELCOM Recommendation superseding HELCOM Recommendation 7/1 concerning monitoring of airborne pollution data for consideration by HELCOM 11.

The meeting also considered the future actions to be taken in relation to the reduction of airborne pollution and proposed that technological questions in this field would be considered as a task of the ad hoc Working Group on Reduction of Industrial Discharges (RID).

Control and limitation of discharges

The STC considered the outcome of the twelfth meeting of the Working Group on Criteria and Standards for Discharges of Harmful Substances into the Baltic Sea Area (WGS).

The Committee decided to elaborate in 1990 a Baltic Sea List of Harmful Substances specifying toxic and bioaccumulating substances to be handled in the context of the 50% reduction measures called for in the Ministerial Declaration.

The Committee was informed on national preparations for collecting data in 1990 for the Second Pollution Load Compilation, and endorsed the futher plan for this work.

The STC considered the outcome of the projects on Urban Areas and Agriculture convened during WGS 12, and endorsed the proposals concerning the further work of the projects. A draft HELCOM Recommendation on reduction of discharges from urban areas by treatment of stormwater, to supersede HELCOM Recommendation 9/9, was prepared for consideration by HELCOM 11.

The Committee also considered matters related to dredging and dumping operations in the Baltic Sea and agreed that environmental impact of such activities should be studied in 1990 to identify whether guidelines for these matters are necessary within the Helsinki Commission. The Federal Republic of Germany undertook to act as Lead Country for dredged spoils.

Industrial discharges

The STC considered the outcome of the second meeting of the ad hoc Working Group on Reduction of Industrial Discharges (RID) and decided to submit for consideration by HELCOM 11 four draft HELCOM Recommendations on restriction of discharges from priority industrial branches: pulp and paper industry, iron and steel industry and chemical industry. It was also decided that a draft HELCOM Recommendation on reduction of emissions to the atmosphere from iron and steel industry should be submitted to HELCOM 11 after necessary amendment.

The Committee supplemented the present list of priority industrial branches with four new ones, namely metal surface plating, machinery equipment production, textile and leather industries.

Follow-up of implementation of the Ministerial Declaration and existing HELCOM Recommendations in the STC field

The Committee was informed on current activities of the Contracting Parties with regard to implementation on the decisions by the Commission in the STC field and finalized the preparation of the reporting formats to be used by the Contracting Parties in the reporting system on implementation of the Ministerial Declaration and HELCOM Recommendations, established by HELCOM 10.

Other activities in the field of the STC

The STC was informed on recent development in the HELCOM Bibliography and endorsed the further steps for the improvement on the existing on-line system.

The Committee elected the Chairmen for the next two-year period and considered the future activities within the STC field with special regard to proposed division of the STC into two new Committees - the Environment Committee and the Technological Committee, and the Terms of Reference of the new Committees.

1.3 Maritime Committee (MC)

The Maritime Committee held its 15th meeting in Leningrad, USSR, 25-29 September 1989. Delegations from all the Contracting Parties attended the meeting. The Executive Secretary of the Commission, Mr. Fleming Otzen and the Scientific Secretary, Ms. Terttu Melvasalo also attended the meeting. Mr. Peter Ehlers of the Federal Republic of Germany, Chairman of the MC, acted as Chairman of the meeting. Mr. Rudolf Lammel of the German Democratic Republic acted as Vice-Chairman of the meeting.

Reception facilities

The Committee considered whether a future updating of the information contained in the Baltic Sea Environment Proceedings No. 28, Reception of Wastes from Ships in the Baltic Sea Area - a MARPOL 73/78 Special Area, would be desirable. The Committee will decide each year whether an updating of the information is necessary.

The Committee invited the Contracting Parties to give information from two or three of their ports concerning the amount of different wastes received. The Committee felt that on the basis of the data collected the seminar on reception facilities, convened in spring 1991 in Finland, could aim at examining whether the differences in the reception services have any impact on the type and amount of the received waste. The effect of different fee systems should also be analyzed.

In accordance with the request by the Commission the Committee requested the Federal Republic of Germany, on behalf of all the Contracting Parties to the Helsinki Convention, to submit a proposal concerning general requirements for ships on the use of reception facilities in the Baltic for consideration by MEPC 29.

Matters related to discharges from ships

The Committee requested the Federal Republic of Germany to submit to MEPC 29, on behalf of all the Baltic Sea States, proposals for amendments to the draft MEPC Circular on Guidelines for the Arrangements for Handling of Oily Wastes in Machinery Spaces in Ships.

Noting the need of a standardization of the throughput of 15 ppm equipment the Committee invited the Contracting Parties to submit proposals on standards to MC 16. Furthermore, the Committee invited the Contracting Parties to investigate the influence of increasing of the density and viscosity for type testing of 15 ppm equipment.

The Committee endorsed the proposal by the Federal Republic of Germany and the USSR to submit to MEPC 29 on behalf of all the Baltic Sea States amendments to the Oil Record Book.

The Committee considered a draft Recommendation concerning amendments to Regulation 7 of Annex IV of the Helsinki Convention and proposed to the Commission to consider the draft Recommendation and the attachment for adoption. The Committee considered also the draft Recommendation concerning national regulations on the discharge of sewage in national waters and proposed to the Commission to consider the draft HELCOM Recommendation for adoption.

The Committee considered further a draft proposal on application of the provisions of Annex IV of the International Convention for the prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, on the discharge of sewage in the Baltic Sea Area and decided upon joint submission to MEPC 29 by the Federal Republic of Germany on behalf of all the Contracting Parties to the Helsinki Convention.

The Committee agreed on a draft HELCOM Recommendation concerning guidelines for capacity calculation of sewage systems on board passenger ships for submission to HELCOM 11 for approval.

The Committee requested the Contracting Parties to submit information on the minimization of the use of chlorine-based disinfectants to MC 16.

Air pollution from ships

The Committee considered the report of the first meeting of the ad hoc Working Group on Air Pollution from Ships (MC AIR) and endorsed that the short-term activities for the Working Group should include, inter alia, recommendations regarding environment related requirements for marine fuel oils, chlorofluorocarbons and halons and medium-term activities should cover reduction of NO_x, incineration of ships' garbage and air pollution related to cargo handling.

The Committee considered a draft HELCOM Recommendation on measures to reduce emissions of harmful chlorofluorocarbons from ships and submitted the draft Recommendation to the Commission for adoption.

The Committee also considered a draft HELCOM Recommendation on reduction of air pollution from ships and decided to propose to the Commission to adopt the draft Recommendation.

The Committee decided on a joint approach by Sweden on behalf of all the Contracting Parties to the Helsinki Convention to MEPC 29 regarding air pollution from ships in general and, in particular, environmental aspects on the improvement of marine fuel qualities.

The Committee further agreed on a proposal to the Commission to convene MC AIR for a second meeting in Helsinki in spring 1990.

Traffic under winter conditions

When considering a draft HELCOM Recommendation on the promotion of the use of safer tankers while carrying oil the Committee decided that the decision on the draft Recommendation should be postponed because the proposed amendments were so fundamental that the Contracting Parties should have time enough to consider the draft Recommendation and the amendments. The Committee invited the Contracting Parties to comment on the proposal to MC 16.

Research and development

When considering the need for information from the Contracting Parties concerning research and development projects the Committee requested the Contracting Parties to submit filled-in reporting formats to the Secretariat and the Secretariat to make a compilation of the research and development projects to MC 16.

Cooperation within IMO

The Committee decided on several joint actions within the International Maritime Organization (IMO) in order to obtain international agreement on certain environmental protection measures proposed or already taken in the Baltic Sea Area.

The Committee decided to continue the coordination of certain specific subjects to strengthen the cooperation in environmental matters within the Helsinki Commission and IMO and to further discuss such coordination at the Baltic Maritime Coordinating Meetings (BMCM) to be held in conjunction with MEPC.

Other activities in the field of the MC

The Committee decided to invite the Contracting Parties to submit information on different control measures and investigations of violations to MC 16.

The Committee considered the List of Activities and Target Dates in detail to intensify the activities within the Committee. Several Contracting Parties offered to act as Lead Countries for certain priority activities.

1.4 Combatting Committee (CC)

The Combatting Committee held its 13th meeting in Rostock, German Democratic Republic, 13-17 November 1989. Delegations from all the Contracting Parties attended the meeting. The Chairman of the Maritime Committee, Mr. Peter Ehlers and the Executive Secretary, Mr. Fleming Otzen also attended the meeting.

Commodore Sven Uhler, Chairman of the CC, acted as Chairman of the meeting.

Spillages in the Baltic Sea Area of oil and other harmful substances

The Committee appreciated the offer by the Federal Republic of Germany to finalize the summary of national oil spillage reports for 1988, supplemented by a map indicating the locations of the different types of spillages, as well as the offer to continue as Lead Country for this activity also in the future. The purpose of this data exchange will be a continuous activity in order to:

- evaluate the effectiveness of using aerial surveillance, especially with remote sensing techniques
- demonstrate and prove the capacity of remote sensing equipment
- get an overview of the oil pollution level of the Baltic.

The Committee considered the draft guidelines for biological investigations and follow-up studies of oil spills in the Baltic. The Committee endorsed the proposal by Finland to organize an informal expert meeting with experts both from the scientific and combatting fields to draft a general HELCOM Recommendation on biological follow-up studies of oil spills and to revise the draft guidelines for submission both to STC (EC) and to CC 14 for consideration.

Activities within other organizations

The Committee received information on the activities within the Copenhagen Agreement during the past year and that the annual meeting decided to prepare a long-term plan of the cooperation within the framework of the Copenhagen Agreement taking into consideration also the long-term work plan for the Combatting Committee of the Helsinki Commission. An operational exercise will be arranged in May 1990 in Denmark and observers from the Contracting Parties to the Helsinki Convention will be invited.

The Committee was informed that the new Bonn Agreement had entered into force on 1 September 1989. Aerial surveillance in the North Sea has been coordinated and tour d'horizon, joint flights and calibration exercises are now carried out regularly.

The Committee was also informed on aerial surveillance cooperation between the Federal Republic of Germany and Denmark and that a similar agreement between the Federal Republic of Germany and the Netherlands will be signed at the end of 1989.

The Committee considered a proposal for the elaboration of an international agreement on emergency preparedness and response to oil spill incidents that had been adopted by the IMO Assembly at its 16th session. The Committee had a positive attitude to contribute and to cooperate to the elaboration of the convention.

Combatting spillages of harmful substances other than oil

The Committee considered the report of the fifth meeting of the ad hoc Working Group on Combatting Spillages of Harmful Substances Other than Oil (CC CHEM). The Committee adopted the Manual on Co-operation in Combatting Marine Pollution, Volume III - Response to chemical spills from tankers and the Study of the Risk for Accidents and the Related Environmental Hazards from the Transportation of Chemicals by Tankers in the Baltic Sea Area for publication.

The Committee agreed to a draft HELCOM Recommendation on the development of national ability to respond to spillages of oil and other harmful substances for submission to HELCOM 11.

The Committee proposed to the Commission that the CC CHEM be convened for a sixth meeting to deal with packaged goods and, if need arises, for future meetings.

The Committee considered a draft HELCOM Recommendation concerning special cooperation in case of a chemical accident at sea. The Committee had doubts whether the draft Recommendation was yet ripe for decision and therefore decided to comment on the draft Recommendation intersessionally in order to finalize the draft Recommendation at CC 14.

Exercises

The Committee considered the outcome of the exercise for oil spill combatting units of all the seven Baltic Sea States. The exercise was a combination of an alarm exercise (POLREP 1989) and an operational and equipment exercise (EXERCISE KALMAR 1989). EXERCISE KALMAR 1989 was the biggest joint combatting exercise ever held amongst the Baltic Sea States. The Committee welcomed the offer by Poland to arrange the next joint HELCOM exercise in the Gdansk area in September 1990. When considering future joint combatting exercises the Committee decided to arrange an informal working group meeting on joint exercises in the Baltic Sea, inter alia, to prepare a seven-year plan for joint exercises.

The Committee approved in principle a draft scheme for reporting pollution caused by algal blooms in the Baltic Sea Area (ALGPOLREP BALTIC) for submission to the Commission for consideration and approval.

In connection with the 13th meeting of the Combatting Committee the German Democratic Republic arranged an exercise of national oil spill combatting units.

Other activities in the field of the CC

According to a decision at CC 12 the Contracting Parties informed the Committee on the ongoing and planned projects within the CC field. The Committee was of the opinion that this information was a first step to improve the possibilities to cooperate in some projects and decided to invite the Contracting Parties to submit information also to CC 14.

The Committee adopted in principle the HELCOM Plan for Aerial Surveillance Co-operation and decided to establish an informal working group with the aim to facilitate the implementation of the plan. The Committee asked the informal working group to examine whether a first flight by each of the seven Contracting Parties according to the HELCOM Plan could take place already before the next meeting of the Committee.

The Committee felt a need for the elaboration of a map indicating the different offshore activities taking place in the Baltic Sea. The Federal Republic of Germany was asked to bring forth together with the Secretariat a tentative map to be presented at the next meeting of the Committee.

The Committee considered the List of Activities and Target Dates to intensify the activities within the Combatting Committee.

2. ADMINISTRATION OF THE COMMISSION DURING 1989

Mr. Göte Svenson and Ms. Eva Smith of Sweden were respectively Chairman and Vice-Chairman of the Commission during 1989.

Mr. Fleming Otzen acted as Executive Secretary, Ms. Terttu Melvasalo, Mr. Lars G. Thorell and Mr. Vassili Rodionov as Scientific, Maritime and Technological Secretaries for the Commission, correspondingly. The other members of the staff of the Commission were the Administrative Assistant, Ms. Ritva Kostakow-Kämpe, the Assistants, Ms. Teija-Liisa Lehtinen, Ms. Leena Heikkilä, Ms. Doris Aghazarian (until 28 July 1989), Ms. Satu Tofferi (as from 1 August 1989) and the Clerk, Mr. Håkan Blomberg. Ms. Svea Sjöholm substituted one Assistant on maternity leave during the periods 1 March - 30 June and 14 August - 21 October 1989.

The contributions of the Contracting Parties to the budget of the Commission is based on equal shares of the seven Contracting Parties. In addition, the Government of Finland has paid an extra contribution to cover the rent of the office, communication and equipment expenses and a part of the salaries of the office staff. The Government of Finland has also paid a special contribution to cover a part of the expenses for data handling services.

The distribution of expenses of the Commission during the fiscal year from 1 July 1988 to 30 June 1989 was approximately as follows:

Meetings		454 000
Salaries		1 794 000
Other administration		1 094 000
Consultant Services		255 000
Publications		130 000
Total	FIM	3 727 000

The Executive Secretary was Secretary General of the tenth meeting of the Commission and conducted the work of the Secretariat.

The meetings of the STC and the MC were held in Sopot, Poland, and in Leningrad, USSR, correspondingly. The meeting of the CC was held in Rostock, the German Democratic Republic. The meetings were well organized by the responsible host countries and the engagement of several national authorities in the meeting arrangements provided an excellent possibility to further enhance the importance of the work within the Helsinki Commission context. All Committee meetings were well and positively covered by the national news media.

The tenth meeting of the Chairmen and the Secretariat of the Helsinki Commission (CASH) was organized with the help of national authorities in Tallinn, USSR, 11-13 June 1989.

The meeting discussed matters related to the work of the Committees, inter alia, assistance from the Committees to facilitate the national implementation of the Ministerial Declaration and the responsibility level of the Committees in relation to the Commission. The meeting also advised the Executive Secrtary on certain matters to be prepared intersessionally by the Secretariat for consideration by the Commission in 1990.

The eleventh meeting of CASH, in which also representatives from the Finnish Ministry of the Environment participated, was held in the Helsinki Commission Secretariat on 31 October 1989. The meeting primarily discussed matters related to preparations for the 11th meeting of the Commission.

Upon invitation from the Swedish Minister of the Environment and Energy, Ms. Birgitta Dahl, the Executive Secretary visited Sweden 7-8 November 1989. Matters related to the future work of the Commission were discussed with the Minister during which discussions also the Chairman of the Commission and representatives of the Ministry participated.

The Executive Secretary had also the opportunity to meet representatives for the Ministry of Defence, the Coast Guard, the National Swedish Environment Protection Board and the Maritime Administration for discussions on national contributions to the work of the Helsinki Commission.

In conjunction with the STC meeting in Poland 23-27 October 1989 the Executive Secretary paid a visit to the Minister of Environmental Protection and Natural Resources, Mr. Bronislaw Kaminski, to discuss matters related to the work of the Helsinki Commission, inter alia, the Polish concept of the Federation of Baltic Foundations carrying out activities for the protection of the environment of the Baltic Sea Area.

The Scientific Secretary made the necessary preparations and acted as Secretary General of the following meetings:
- the Sixth Meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EGAP), Copenhagen, Denmark, 18-20 April 1989;
- the Third Meeting of the ad hoc Group of Experts for the Preparation of the Second Periodic Assessment (GESPA), Tallinn, USSR, 3-6 May 1989;
- the Fourth Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (MORS), Rostock-Warnemünde, the German Democratic Republic, 29 May - 2 June 1989;
- the 16th Meeting of the Scientific-Technological Committee (STC), Sopot, Poland, 23-27 October 1989 (together with the Technological Secretary).

The Technological Secretary made the necessary preparations and acted as Secretary General of the following meetings:
- the Twelfth Meeting of the Working Group on Criteria and Standards for Discharges of Harmful Substances into the Baltic Sea Area (WGS), Ronne, Denmark, 22-26 May 1989;
- the Second Meeting of the ad hoc Working Group on Reduction of Industrial Discharges (RID), Helsinki, 11-15 September 1989.

The Scientific Secretary and the Technological Secretary have also carried out tasks related to the implementation and follow-up of the decisions concerning matters in the scientific and the technological fields.

The Maritime Secretary made the necessary preparations and acted as Secretary General of the following meetings:

- the 3rd meeting of the Baltic Maritime Co-ordinating Meeting (BMCM) (MEPC 27), London, United Kingdom, 12 March 1989
- the 5th meeting of the ad hoc Working Group on Combatting Spillages of Harmful Substances Other than Oil (CC CHEM), Rostock, German Democratic Republic, from 30 May to 1 June 1989
- the first meeting of the ad hoc Working Group on Air Pollution from Ships (MC AIR), Helsinki, Finland, 3-6 September 1989
- the 15th meeting of the Maritime Committee (MC), Leningrad, USSR, 25-29 September 1989
- the 13th meeting of the Combatting Committee (CC), Rostock, German Democratic Republic, 13-17 November 1989.

The Maritime Secretary has also carried out tasks related to the implementation and follow-up of the decisions concerning matters in the maritime and combatting fields.

Publications and Data

In accordance with the decision of the Commission the following volumes of the Baltic Sea Environment Proceedings have been published:

No. 28 Reception of wastes from ships in the Baltic Sea Area - a MARPOL 73/78 Special Area

No. 29 Activities of the Commission 1988; Including the Tenth Meeting of the Commission held in Helsinki 14-17 February 1989

No. 30 Second seminar on wastewater treatment in urban areas, 6-8 September 1987, Visby, Sweden

No. 31 Three years observations of the levels of some radionuclides in the Baltic Sea after the Chernobyl accident

No. 32 Deposition of airborne pollutants on the Baltic Sea Area, 1983-1985 and 1986

A preprint copy (grey carton covers) suitable for citing in open literature was distributed of the "Intercalibration of chlorophyll a, primary production capacity, and phyto- and zooplankton abundances during the Baltic Sea Patchiness Experiment (PEX '86)".

The Baltic Marine Environment Bibliography for the year 1987 was distributed to the Baltic Sea States on microfiches in August 1989.

The existing Baltic Monitoring Programme data was submitted by the consultant to the Contracting Parties on magnetic tapes in December 1989, and the graphic presentations of data from selected stations according to the agreement between the Commission and the consultant to STC 16.

Furthermore, data submitted by the Contracting Parties on airborne pollution and radioactive substances have been distributed during 1989.

Cooperation with other International Organizations

The following organizations were observers of the Commission during 1989:

- United Nations Environment Programme (UNEP)
- United Nations Economic Commission for Europe (ECE)

- International Maritime Organization (IMO)
- World Health Organization, Regional Office for Europe (WHO/EURO)
- Oslo and Paris Commissions (OSCOM/PARCOM)
- International Baltic Sea Fishery Commission (IBSFC)
- International Council for the Exploration of the Sea (ICES)
- International Atomic Energy Agency (IAEA)
- World Meteorological Organization (WMO)
- Intergovernmental Oceanographic Commission (IOC)
- Stichting Greenpeace Council, Greenpeace International

In addition to the representation of the observer organizations at the tenth meeting of the Commission, a representative of ICES and a representative of IMO as well as a representative of Greenpeace International attended the 16th meeting of STC. A representative of the Paris Commission, a representative of ICES and a representative of ECE attended the sixth meeting of EGAP. Furthermore, representatives of IAEA, International Laboratory on Marine Radioactivity (ILMR), and ICES attended the fourth meeting of MORS. Representatives of ICES as well as of the Baltic Marine Biologists (BMB) and the Conferences of Baltic Oceanographers (CBO) also attended the third meeting of GESPA. Representatives from IMO and from Norway attended the first meeting of MC AIR.

The Commission was represented by Ms. Emelie Enckell of Finland at the 13th meeting of the Working Group on Oil Pollution (GOP) of the Paris Commission in Paris, France, in February 1989, by Mr. Julius Lassig of Finland at the 16th meeting of the Standing Advisory Committee for Scientific Advice (SACSA) of the Oslo Commission in Ghent, Belgium, in March 1989, by Mr. Jürgen Pankrath of the Federal Republic of Germany at the seventh meeting of the Working Group on the Atmospheric Input of Pollutants (ATMOS) of the Paris Commission, in London, UK, in November 1989, and by the Chairman of the Commission, Mr. Göte Svenson, at the North Sea Conference Preparatory Meeting in the Netherlands in December 1989.

The Executive Secretary represented the Commission at the eleventh Joint Meeting of the Oslo and Paris Commissions in Dublin in June 1989 and the Nordic Council's International Conference on Pollution of the Seas in Copenhagen in October 1989.

The Executive Secretary and the Scientific Secretary visited ICES, Copenhagen, in February 1990 to discuss with representatives of the ICES and the OSPARCOM Secretariats, ways to improve coordination, cooperation, etc. between ICES, OSPARCOM and HELCOM.

The Chairman of the Commission, the Executive Secretary and the Scientific Secretary met the President of ICES and its General Secretary and Environment Officer in ICES Headquarters in February 1990 to discuss the continued cooperation between ICES and HELCOM and a possible closer cooperation between the two Secretariats.

The Scientific Secretary represented the Commission at the 14th meeting of the Joint Monitoring Group of Oslo and Paris Commissions in Vigo, Spain in January 1989, at the meeting of the ICES Working Group on Baltic Marine Environment in Sopot, Poland in April 1989, at the meetings related with ECE EMEP activities and at UNEP Intersecretariat meeting in August/ September 1989, in Geneva, Switzerland, at the ICES Statutory Meeting in the Hague, Netherlands in October 1989 and at the International Workshop "Environmetal Management in the Baltic Region" in Leningrad, USSR in November 1989.

The Technological Secretary represented the Commission at the 16th meeting of the Technical Working Group of the Paris Commission in Ghent, Belgium in March 1989, at the HELCOM/PARCOM Seminar on Nutrient Removal from Municipal Wastewaters in Tampere, Finland in September 1989, at the 15th session of the International Baltic Sea Fishery Commission in Cracow, Poland in September 1989 and at the OSCOM International Seminar on Environmental Aspects of Dredging Activities in Nantes, France in November 1989.

The Maritime Secretary represented the Commission at the 27th session of IMO's Marine Environment Protection Committee (MEPC) in London, United Kingdom in March 1989, at the Copenhagen Agreement oil combatting exercise in Kristiansand, Norway in May 1989, at the conference The Baltic Boundless Co-operation in Malmö, Sweden in August 1989, at the XIX meeting of the Contracting Parties to the Copenhagen Agreement in Copenhagen, Denmark, in August 1989 and at the Helsinki Commission oil combatting exercise in Kalmar, Sweden in October 1989.

3. ELEVENTH MEETING OF THE COMMISSION, 13-16 February 1990

The Helsinki Commission held its eleventh meeting in Helsinki from 13 to 16 February 1990. The meeting was attended by representatives of the Governments of the seven Baltic Sea States as well as by observers from the following intergovernmental organizations: International Baltic Sea Fishery Commission (IBSFC), International Council for the Exploration of the Sea (ICES), International Maritime Organization (IMO), World Health Organization/Regional Office for Europe (WHO/EURO) and the Commission of the European Communities (CEC) to whom the Commission granted observer status from the start of the meeting. The meeting was further attended by observers from the non-governmental international organization Greenpeace International. The meeting was chaired by the Chairman of the Commission, Mr. Göte Svenson from Sweden. Commander Fleming Otzen, Executive Secretary of the Commission acted as Secretary General of the meeting.

The Chairman of the Commission informed the meeting of the sudden death on 11 February 1990 of Professor Aarno Voipio, who had been the first Executive Secretary of the Commission. The Meeting observed a minute of silence in remembrance of Aarno Voipio and authorized the Chairman and the Executive Secretary to convey the Commission's condolences to the Voipio family.

The Commission considered and decided upon matters within the scientific, technological, maritime and legal fields related to the protection of the Baltic Sea as well as upon matters related to cooperation in combatting pollution on the sea.

The preparatory work had been done during the intersessional period by the three subsidiary bodies (STC, MC and CC) and several working groups as well as ad hoc working groups and informal expert meetings.

HELCOM Recommendations adopted by the eleventh meeting of the Commission

The Commission adopted seven HELCOM Recommendations related to the field of the Scientific-Technological Committee (STC), concerning:
- monitoring of airborne pollution load (11/1)
- reduction of discharges from urban areas by proper management of stormwater (11/2)
- restriction of discharges from the sulphite pulp industry (11/3)
- restriction of discharges from the kraft pulp industry (11/4)

- restriction of discharges from the iron and steel industry (11/5)
- basic principles in wastewater treatment in chemical industry (11/6)
- measures aiming at the reduction of emissions to the atmosphere from the iron and steel industry (11/7)

Furthermore, the Commission adopted five HELCOM Recommendations related to the field of the Maritime Committee (MC), concerning:
- amendments to Regulation 7 of Annex IV of the Helsinki Convention (11/8)
- national regulations on the discharge of sewage in national waters (11/9)
- guidelines for capacity calculations for sewage systems on board passenger ships (11/10)
- measures to reduce the emissions of harmful chlorofluorocarbons from ships (11/11)
- reduction of airborne pollution from ships (11/12)

The Commission also adopted one HELCOM Recommendation related to the field of the Combatting Committee (CC), concerning development of national ability to respond to spillages of oil and other harmful substances (11/13).

All the Recommendations adopted by the eleventh meeting of the Commission are attached to this report.

Matters related to the administration of the Commission

The Commission adopted the budget for the fiscal year 1990-91 of the order of FIM 4.4 million.

The Commission took note of the information on national activities in general related to the protection of the Baltic Sea provided by the Baltic Sea States. The Commission further took note of the short progress reports provided by the Contracting Parties on the implementation of the Ministerial Declaration in accordance with the request from the tenth meeting of the Commission. The Commission recalled that in 1990 the obligatory national implementation reports on the Declaration and HELCOM Recommendations will be submitted in a unified form and compiled for consideration by the next meeting of the Commission in February 1991.

Following the decision by the tenth meeting of the Commission to divide the work of the present Scientific-Technological Committee (STC) between two new Committees, the Commission adopted the terms of reference for the new Committees, the Environment Committee (EC) and the Technological Committee (TC), as submitted by the Executive Secretary after consultations with the Chairmen and Vice-Chairmen of the STC and final consideration by the STC. The Commission also decided to change the title of the Scientific Secretary to Environment Secretary.

The Commission further decided to establish the present ad hoc Group on Reduction of Industrial Dischages (RID) as a permanent subsidiary body under the TC.

The Commission endorsed the decision by the Executive Secretary to prolong the term of office of the Environment Secretary, Ms. Terttu Melvasalo until 31 July 1993 and further endorsed the decision by the Executive Secretary to upgrade the salary level of the present Clerk of the Secretariat, Mr. Håkan Blomberg, as from 1 July 1990.

According to the decision by HELCOM 10 the Secretariat had submitted a proposal on how the Committees could act in a more flexible and independent

way in matters related to decision on purely technical questions. The Commission adopted the procedure to obtain this flexibility and autonomy as proposed by the Secretariat and further requested the Committees to observe this procedure in their future work.

On the basis of a proposal by the Secretariat, following the request by HELCOM 10, the Commission adopted a set of guidelines for cooperation between the Committees of the Helsinki Commission and financial aspects related thereto. The Committees and the meetings of the Chairmen and the Secretariat of the Helsinki Commission (CASH) were requested to observe these guidelines in the future.

The Commission also requested the Secretariat, in cooperation with the Committee Chairmen, to elaborate a list of topics common for two or more Committees defining what specific subjects within these topics would be the responsibilities of the different Committees, to be considered by the next meetings of the Committees. The Secretariat was further requested to prepare a compilation of HELCOM Recommendations which are still subject to implementation as well as a list of Recommendations already implemented or superseded by other Recommendations.

Following the decision by its tenth meeting and based on submissions by the Contracting Parties as well as by the Executive Secretary the Commission had a general discussion on the introduction of more binding and stringent measures in the field of prevention and control by including further technical provisions in the Annexes to the Helsinki Convention.

As a result of the discussions the Commission decided to establish an ad hoc group to consider a possible revision of the Convention in order to bring the Convention and Annexes in line with the development since 1974 and with this goal consider in particular:

1. the need and possibilities to introduce more legally binding technical provisions in the field of prevention and control relating to pollution from land-based sources
2. how and to what extent existing and future recommendations by the Commission could be reflected in the Convention and its Annexes
3. implementation of best available technology to reduce landbased pollution
4. introduction of the commitment to the precautionary principle
5. development of instruments to meet the commitment to reduce pollution from diffuse sources
6. the application area of the Convention and its possible enlargement to cover internal waters and the whole catchment area of the Baltic Sea
7. prohibition of incineration and dumping activities at sea and evaluation of the risks of possible sub-seabed deposition
8. the reporting procedures in order to strengthen the follow-up of activities
9. all other matters of importance in order to make the work of the Commission more effective in accomplishing its common environmental goals.

The Group, named the HELCOM ad hoc Group for Revision of the Convention (HELCOM GRC), will be composed of the ad hoc Group of Legal Experts (LEX) expanded to include, i.a., scientific and technological expertise.

The HELCOM GRC shall, to the 12th meeting of the Commission, make a first report, including, i.a., a proposal for the continuation of the work. Thereafter, a draft for a revised Convention should be worked out for presentation at the 15th meeting of the Commission in 1994 to be held at Ministerial level.

The Group will be chaired by Finland and the Commission agreed that the non-governmental international organizations should be invited to present written material to the Group. The Group was, furthermore, encouraged to arrange a hearing for these organizations at a time the Group would find appropriate.

The Commission invited the Environment Ministers to consider the need for, the time and frame of an additional meeting before 1994 to speed up the implementation of the Commission's work, to give additional guidelines to it and to follow up the outcome of the Conference for the Protection of the Baltic Sea to be held in Sweden, in September 1990, at Prime Minister level.

The Executive Secretary was requested by the Commission to undertake an inventory concerning the need for investments by the Contracting Parties to fulfill their commitments within the framework of the Helsinki Convention.

The Commission expressed its pleasure on action taken between ICES, OSCOM/PARCOM and HELCOM at the inter-secretariat meeting held at ICES headquarters in Copenhagen, in February 1990, to develop the cooperation even better, i.a., via the now established closer cooperation between the Secretariats . A second inter-secretariat meeting will be held at the HELCOM headquarters in Helsinki, in January 1991.

Matters related to the Scientific-Technological Committee (STC)

The Commission approved the report of the 16th meeting of the STC in general. The substantive items from the report are described in detail under Chapter 1.2 of this report.

The Commission decided to divide the STC into two new Committees, Environment Committee (EC) and Technological Committee (TC). The decision is valid immediately after the eleventh meeting of the Commission with the terms of reference as adopted by the meeting.

The Commission was informed about the two new evaluation reports published in the Baltic Sea Environment Proceedings concerning airborne pollution data 1983-1986 (BSEP 32) and observations of radioactive substances in the Baltic Sea since the Chernobyl accident in 1986 (BSEP 31). The Commission adopted the revised programme regarding monitoring of airborne pollution as HELCOM Recommendation 11/1. The Commission was also informed about steps taken in cooperation with the ECE and its EMEP facilities to store and process the data of the Helsinki Commission, as well as on results of cooperation with other consultants of the Commission on different data handling (Baltic monitoring data, data on emissions to the air, data on radioactive substances in the environment and release data on radioactive substances, bibliographic data and bibliographic on-line service).

The Commission requested the experts and the Secretariat to finalize and publish the outcome of the project established to prepare the Second Periodic Assessment of the State of the Baltic Sea as soon as possible. The Baltic Sea States were also requested to report, as soon as possible, the state of their coastal area, and the topic would be considered by the new Environment

Committee. Necessary steps will also be considered in cooperation with WHO/EURO in relation to their geographic information system as well as cooperation with UNEP/INFOTERRA on exchange of bibliographic information and other possible matters.

The Commission adopted new or revised HELCOM Recommendations concerning reduction of land-based pollution to the Baltic Sea, such as proper management of stormwater, restriction of discharges from the pulp and paper industries (sulphite pulp and kraft pulp industries) as well as restriction of discharges to the sea and emissions to the atmosphere from the iron and steel industry.

The Commission was also informed about the status of the preparation for a compilation of discharge data collected in a harmonized way during 1990. Information was also considered concerning implementation of the Ministerial Declaration of 1988 and of relevant Recommendations concerning reduction of discharges from land-based pollution.

Matters related to the Maritime Committee (MC)

The Commission approved the report of the 15th meeting of the Maritime Committee in general. The substantive items from the report are described in detail under Chapter 1.3 of this publication.

When considering the substantive items emerging from the report the Commission, inter alia, adopted three HELCOM Recommendations related to discharges of sewage from ships, entitled Amendments to Regulation 7 of Annex IV of the Helsinki Convention, National Regulations on the Discharge of Sewage in National Waters and Guidelines for Capacity Calculation of Sewage Systems On Board Passenger Ships.

With regard to air pollution from ships the Commission agreed on joint actions within the International Maritime Organization (IMO) on effective global measures to reduce the emissions from ships. The Commission was informed that Sweden, on behalf of all the Contracting Parties to the Helsinki Convention, had submitted a proposal to IMO regarding air pollution from ships in general and, in particular, environmental aspects on the improvement of marine fuel oil qualities. The Commission further adopted a HELCOM Recommendation on measures to reduce emissions of harmful chlorofluorocarbons from ships and a HELCOM Recommendation on reduction of air pollution from ships.

Matters related to the Combatting Committee (CC)

The Commission approved the report of the 13th meeting of the Combatting Committee in general. The substantive items from the report are described in detail under Chapter 1.4 of this publication.

The Commission decided to reconvene the ad hoc Working Group on Combatting Spillages of Harmful Substances Other than Oil (CC CHEM) to work out guidelines related to loss of packaged goods.

The Commission adopted a HELCOM Recommendation on development of national ability to respond to spillages of oil and other harmful substances.

The Commission noted the continuing positive trend in organizing and performing joint combatting exercises and decided to make a seven-year plan for joint operational exercises for all the Baltic Sea States. The Commission further decided on a scheme for reporting pollution caused by algal blooms in the Baltic Sea Area (ALGPOLREP BALTIC). The scheme should be used on trial bases until 1995 at which time the system should be evaluated and reviewed.

The Commission was informed that the Contracting Parties had submitted information on research and development projects to intensify the work within the Committee and to improve the possibilities to cooperate in relevant projects.

The Commission was also informed that the Committee had adopted, in principle, the HELCOM Plan for Aerial Surveillance Co-operation.

A summary of the oil spillages in the Baltic Sea during 1988 was further presented to the Commission.

The Commission requested the Contracting Parties to contribute to the elaboration of the global convention on oil spill preparedness and response.

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LIST OF HELCOM RECOMMENDATIONS PASSED DURING 1989*) AND 1990

Recommendation 10/1
Recommendation concerning abnormal situations in the marine environment
- adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/2
Recommendation concerning assessments of the effects of pollution on the coastal areas of the Baltic Sea
- adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/3
Recommendation concerning monitoring of radioactive substances
- adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/4
Recommendation concerning pollution load compilation
- adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/5
Recommendation concerning guidelines for the establishment of adequate reception facilities in ports
- adopted 15 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/6
Recommendation concerning application by the Baltic Sea States of a Helsinki Convention form for reporting alleged inadequacy of reception facilities for sewage
- adopted 15 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/7
Recommendation concerning general requirements for reception of wastes
- adopted 15 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/8
Recommendation concerning co-operation in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations
- adopted 15 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 10/9
Recommendation concerning amendment to Regulation 8 of Annex IV of the Helsinki Convention
- adopted 15 February 1989, having regard to Article 24 of the Helsinki Convention

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*) Recommendations passed during 1989 are included in Baltic Sea Environment Proceedings No. 29

Recommendation 10/10
Recommendation concerning measures in order to minimize pollution from offshore installations
- adopted 15 February 1989, having regard to Article 10 of the Helsinki Convention

Recommendation 10/11
Recommendation concerning international cooperation on liability for damage resulting from vessel-based pollution
- adopted 15 February 1989, having regard to Article 17 of the Helsinki Convention

Recommendation 11/1
Recommendation concerning monitoring of airborne pollution load
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/2
Recommendation concerning reduction of discharges from urban areas by proper management of stormwater
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/3
Recommendation concerning restriction of discharges from the sulphite pulp industry
- adopted 15 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/4
Recommendation concerning restriction of discharges from the kraft pulp industry
- adopted 15 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/5
Recommendation concerning restriction of discharges from the iron and steel industry
- adopted 15 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/6
Recommendation concerning basic principles in wastewater management in chemical industry
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/7
Recommendation concerning measures aiming at the reduction of emissions to the atmosphere from the iron and steel industry
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/8
Recommendation concerning amendments to Regulation 7 of Annex IV of the Helsinki Convention
- adopted 14 February 1990, having regard to Article 13, Paragraph c) and Article 24, Paragraph 2 of the Helsinki Convention

Recommendation 11/9
Recommendation concerning national regulations on the discharge of sewage in national waters
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/10
Recommendation concerning guidelines for capacity calculation of sewage systems on board passenger ships
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/11
Recommendation concerning measures to reduce the emissions of harmful chlorofluorocarbons from ships
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/12
Recommendation concerning reduction of air pollution from ships
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

Recommendation 11/13
Recommendation concerning development of national ability to respond to spillages of oil and other harmful substances
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

HELCOM RECOMMENDATION 11/1 *)

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

MONITORING OF AIRBORNE POLLUTION LOAD

THE COMMISSION,

RECALLING Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area, and to endeavour to use best practicable means in order to minimize the airborne pollution of the Baltic Sea Area by noxious substances,

RECALLING ALSO Paragraph 3 of the Article 16 of the Helsinki Convention, in which the Contracting Parties undertake directly, or when appropriate, through competent regional or other international organizations and other basis of information and data acquired pursuant to Paragraphs 1 and 2 of Article 16, to cooperate in developing intercomparable observation methods, in performing baseline studies and in establishing complementary or joint programmes for monitoring,

NOTING the increasing concern on harmful effects of pollutants in the environment and that an essential amount of various contaminants is transported via the atmosphere,

NOTING FURTHER the decision by the Commission to start joint monitoring programme as adopted as the HELCOM Recommendation 7/1,

DESIRING to limit the pollution of the Baltic Sea due to atmospheric transport of harmful substances,

BEING MINDFUL of the need of reliable data on the amounts of harmful substances carried by the air to the Baltic Sea,

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*) This Recommendation supersedes HELCOM Recommendation 7/1

RECOMMENDS to the Governments of the Contracting Parties to the Helsinki Convention that:

a) each Baltic Sea State should have at least one monitoring station on the sea (or on the coast), to be included in the joint monitoring programme

./1 b) the list attached to this Recommendation (Appendix 1) should be used as the basis for the monitoring programme in all Baltic Sea States, bearing in mind that the list consists of minimum requirements; and

c) whenever possible, also experimental monitoring of those substances which are now included in the present list attached to this Recommendation, should be started,

RECOMMENDS ALSO that all laboratories involved would apply reliable analytical procedures taking into account also the development in other relevant international organizations concerning analytical, technological and data quality assurance,

RECOMMENDS FURTHER that as prerequisite for reliable calculations for modelling concerning precipitation of the substances to the Baltic Sea, emission data should be provided by all Baltic Sea States on relevant substances,

RECOMMENDS FURTHERMORE that the Baltic Sea States would report their monitoring data, to the Commission using the form attached to this
./2 Recommendation (Appendix 2),

RECOMMENDS FURTHERMORE that:

a) the annual monitoring data be submitted 1 April of the following year to the Secretariat;

b) the methodological and other relevant additional information concerning monitoring be submitted every third year/or when there will be changes in the methods or in the monitoring network, following the procedure started in 1986 and using the
./3 form attached to this Recommendation (Appendix 3);

c) the emission data to be submitted in 1990 and later on in a harmonized way with other relevant international organizations.

RECOMMENDED LIST OF PARAMETERS FOR THE MONITORING OF AIRBORNE POLLUTION LOAD

		Routine Minimum Requirements	Experimental
N	NO_3^- precipitation	+	
	NH_4^+ precipitation	+	
	NO_2 gas	–	+
	HNO_3 gas + NO_3^- particles	–	+
	NH_3 gas + NH_4^+ particles	–	+
Pb	precipitation	+ *)	
	particles	–	+
Cd	precipitation	+ *)	
	particles	–	+
Cu, Zn	precipitation	+ *)	
	particles	–	+
Cr, Ni, As, Hg	precipitation	–	+

\+ monitored on routine or experimental basis
– not monitored on routine basis
*) monitored on routine basis, from at least one station of each country

For quality assurance purposes, the Countries are requested to report the major ion (Na, K, Ca, Mg, $SO_4^=$, Cl^-) concentrations in precipitation although they are not on the list of the routine minimum requirements

Country

Station

Year

Contact Address

PRECIPITATION Bulk [_] Wet only [_] **

Daily [_] Weekly [_] Monthly [_] ***

Month	Precipitation mm	NO_3^- -N mg dm^{-3}	NH_4^+ -N mg dm^{-3}	Pb µg dm^{-3}	Cd µg dm^{-3}	Zn µg dm^{-3}	Cu µg dm^{-3}	Na mg dm^{-3}	K mg dm^{-3}	Mg mg dm^{-3}	Ca mg dm^{-3}	Cl^- mg dm^{-3}	SO_4^- S mg dm^{-3}
Jan													
Feb													
Mar													
Apr													
May													
June													
July													
Aug													
Sept													
Oct													
Nov													
Dec													

** Indicate which sampler is used
*** Indicate which sampling period is used

HELCOM/EGAP Deposition Monitoring
Reporting Format for routine minimum requirements
(Instructions for filling in the format are attached).

Country

Station

Year

Contact Address

PRECIPITATION Bulk [_] Wet only [_] **

Daily [_] Weekly [_] Monthly [_] ***

A I R C O N C E N T R A T I O N

Month	Cr µg dm^{-3}	Ni µg dm^{-3}	As µg dm^{-3}	Hg µg dm^{-3}	Pb ng m^{-3}	Cu ng m^{-3}	Zn ng m^{-3}	NO_2-N µg m^{-3}	HNO_3 and NO_3^- µg N m^{-3}	NH_3 and NH_4^+ µg N m^{-3}	Cd ng m^{-3}
Jan											
Feb											
Mar											
Apr											
May											
June											
July											
Aug											
Sept											
Oct											
Nov											
Dec											

** Indicate which sampler is used
*** Indicate which sampling period is used

HELCOM/EGAP Deposition Monitoring
Reporting Format for experimental programme
(Instructions for filling in the format are attached).

TENTATIVE INSTRUCTIONS FOR REPORTING MONITORED DATA TO THE BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

Monthly mean values should be reported in the following way:

Precipitation

The precipitation amount should preferably be based on the volume collected in the actual deposition sampler; if not, the base should be given.

Concentrations of precipitation

Sampling periods less than a month

The concentration of each species should be precipitation amount weighted arithmetic mean values, i.e. calculated with the following formula:

$$C_M = \frac{\Sigma PiCi}{\Sigma Pi}$$

where C_M is the weighted monthly mean. Pi is the precipitation amount (mm) collected at each sampling period and Ci is the corresdponding concentration. ΣPiCi is thus the total collected amount per unit area and month and ΣPi the total precipitation amount for the month in question.

Weekly sampling

If weekly sampling is used and if a week includes two adjacent months, the measured data should be allocated to the month which contains the largest number of days in the week in question.

Concentrations below the detection limit

When the concentrations are below the detection limit the value zero should be used for the mean calculations. When sampling or analysis have failed due to a too small sample this should be neglected. If sampling and analysis have failed due to other reasons this should be marked with an asterisk after the concentration values.

Units

The concentrations should be expressed in mg or µg of the element in question (e.g. N or S) per dm^{-3} precipitation or per m^{-3} air as indicated in the reporting format.

REPORTING FORMAT FOR THE EVALUATION OF DATA WITH RESPECT TO AIRBORNE DEPOSITION TO THE BALTIC SEA

Background information about each station

Country: _____

Name of the station: _____

Latitude: _____ Longitude: _____

Elevation: _____

Responsible national institute: _____

Full address: _____

_____

Country: _____ Tel. No.: _____

Surrounding area (agricultural land, forest, important sources, etc., if possible. If the monitoring station is within a monitoring network, this should be indicated):

_____

_____

_____

_____

_____

Monitored parameters:

_____

_____

_____

_____

_____

_____

Sampling technique for those components specified in the reporting format that are monitored at the station

Precipitation (give a short description including material, dimensions, height above ground, whether bulk or wet-only collector is used, sampling time, whether the funnel is heated wintertime and whether the precipitation is refrigerated):

Air concentrations Type of analyses, averaging time, a description of the air inlet and its height above ground, flowrate and materials used should be specified for all of the following components that are monitored.

NO_2: (if wet chemical sampling is used the NO_2^-/NO_2 factor used for calculating the NO_2 concentration should be specified):

gaseous NH_3 and/or particulate NH_4^+: (height above ground level is here a very important parameter. If gaseous and particulate forms are sampled separately the technique should be specified):

gaseous HNO_3 and/or particulate NO_3^-: (an accurate description of the sampling inlet is here a very important parameter. If the gas and particles phases are separated the technique used should be spcified):

Chemical analyses

Please specify the methods used and if possible give a literature reference. The detection limit expressed in the units specified in the reporting format should be given (they are here given within brackets).

Precipitation

NO_3^- (mg N l^{-1}):
NH_4^+ (mg N l^{-1}):
SO_4^{2-} (mg S l^{-1}):
Cl^- (mg l^{-1}):
Na^+ (mg l^{-1}):
K^+ (mg l^{-1}):
Ca^{2+} (mg l^{-1}):
Mg^{2+} (mg l^{-1}):
Pb (µg l^{-1}):
Cd (µg l^{-1}):
Cu (µg l^{-1}):
Zn (µg l^{-1}):
Cr (µg l^{-1}):
Ni (µg l^{-1}):
As (µg l^{-1}):
Hg (µg l^{-1}):

Air concentrations

NO_2 (µg N m^{-3}):
HNO_3/NO_3^- (µg N m^{-3}):
NH_3/NH_4^+ (µg N m^{-3}):
Pb (ng m^{-3}):
Cu (ng m^{-3}):
Zn (ng m^{-3}):
Cd (ng m^{-3}):

Has the laboratory participated in national or international intercalibrations concerning the above specified species? If yes, please give a reference if possible.

HELCOM RECOMMENDATION 11/2 *)

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

REDUCTION OF DISCHARGES FROM URBAN AREAS BY PROPER MANAGEMENT OF STORMWATER

THE COMMISSION,

RECALLING Paragraph 1 of Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

RECALLING ALSO HELCOM Recommendation 5/1 regarding limitation of oil in stormwater systems,

RECOGNIZING the need for limiting the harmful effects caused by the stormwater discharged to the Baltic Sea,

RECOMMENDS to the Governments of the Contracting Parties to the Helsinki Convention that:

a) measures should be taken already at the source to prevent the deterioration of the quality of stormwater (e.g. efficient dry street cleaning and reduction of lead in petrol);

b) where a stormwater in a separate sewer system district is collected from areas with high traffic

   (i) flow equalization units should be provided whenever possible for the first flush of stormwater; and

   (ii) this water be conveyed to a sewage treatment plant;

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*) This Recommendation supersedes HELCOM Recommendation 9/9

c) contaminated stormwater from heavily polluted industrial areas (loading, unloading, storing) should be treated as polluted wastewater;

d) all possible means should be taken to minimize the volume of stormwater entering combined sewer systems (minimization of the volume, reached e.g. by local infiltration);

e) in areas with combined sewer systems, overflow should not be allowed more than on the average 10 times per year or limited to 10 percent of the total amount of pollutants conveyed in the sewer system (several overflow occasions during one single day are regarded as one), which aim may be reached by means of appropriate design of the sewerage system and by providing retention facilities; *) the aim should be further to catch the first (most polluted) volume of overflow for conveying it to the treatment plant, and to decrease the amount of overflowing pollutants, combined sewer outflows should be equipped with some treatment facilities such as swirl concentrators,

RESOLVES that a decision on the date from which paragraph e) of this Recommendation should be implemented will be taken in 1995. **)

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*) Experience shows that the easiest way to express pollution load caused by combined sewer overflow is to use the indirect figure of frequency, i.e. number of times per year, because thus it is not necessary to undertake the difficult task of determining the quality of the combined sewer overflow water in each case.

**) The aim is to have paragraph e) implemented in 1998, but lack of knowledge makes it impossible to set this date definitely as of today. National projects, however, are believed to produce the information needed to take a decision by 1995.

HELCOM RECOMMENDATION 11/3

Adopted 15 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

RESTRICTION OF DISCHARGES FROM THE SULPHITE PULP INDUSTRY

THE COMMISSION,

RECALLING that according to Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) the Contracting Parties shall take all appropriate measures to control and strictly limit pollution by noxious substances,

RECALLING ALSO that Annex II of the Helsinki Convention defines lignin substances contained in industrial wastewaters as noxious substances for the purposes of Article 6 of the Convention, and that Annex III of the Convention defines organic substances and nutrients as substances to be controlled to minimize land-based pollution of the marine environment,

RECALLING ALSO that the Ministerial Declaration at the ninth Meeting of the Helsinki Commission calls for a reduction of persistent organic substances and of nutrients for example in the order of 50%,

RECOGNIZING FURTHER that the sulphite pulp mills are responsible for an important part of the discharges from the pulp and paper industry into the Baltic Sea,

DESIRING to limit the discharges from this industry with best available technology, *)

RECOMMENDS that the Governments of the Contracting Parties as a first step take measures so that the specific loading from each Contracting Party's production of sulphite pulp and of neutral sulphite semi-chemical pulp (NSSC) within the catchment area of the Baltic Sea shall

a) from January 1, 1995 not exceed the following annual mean values in kg/tADP (Air Dry Pulp) for

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*) The term "best available technology" is understood to take into consideration technical and economic feasibility.

1) sulphite pulp

	unbleached	bleached
COD	90	150
tot-P	0.08	0.1
AOX	no value	2-3
BOD_5	15	20

2) NSSC

	Fresh process water	Salt process water
COD	30	200
tot-P	0.05	0.15
BOD_5	6	15

b) from January 1, 2000 not exceed the following annual mean values in kg/tADP for sulphite pulp

	unbleached	bleached
COD	50	100
tot-P	0.05	0.08
AOX	no value	1
BOD_5	10	15

The method of analysis for AOX should be SCAN-W 9:89 or DIN 38 409, part 14. For the analysis of COD the dichromate method should be used. For the analysis of tot-P SFS 3026 or similar methods should be used. When analysing BOD_5 ATU should be used. All analyses should be made on unsettled samples,

RECOMMENDS FURTHER that the method of analysis for tot-N be agreed upon so that maximum average loads of tot-N from the production of sulphite pulp and NSSC can be considered and agreed upon within three years,

RECOMMENDS FURTHER that the Contracting Parties re-evaluate before the Commission meeting in 1994 the emission limit values of the present Recommendation and reconsider them, e.g. on a "plant by plant" basis,

RECOMMENDS ALSO that the Contracting Parties report to the Commission every three years starting in 1997.

BALTIC MARINE ENVIRONMENT
PROTECTION COMMISSION
• HELSINKI COMMISSION •

HELCOM RECOMMENDATION 11/4 *)

Adopted 15 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

RESTRICTION OF DISCHARGES FROM THE KRAFT PULP INDUSTRY

THE COMMISSION,

RECALLING that according to Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention) the Contracting Parties shall take all appropriate measures to control and strictly limit pollution by noxious substances,

RECALLING ALSO that Annex II of the Helsinki Convention defines lignin substances contained in industrial wastewaters as noxious substances for the purposes of Article 6 of the Convention, and that Annex III of the Convention defines organic substances and nutrients as substances to be controlled to minimize land-based pollution of the marine environment,

RECALLING further that HELCOM Recommendation 9/6 calls for an agreement on maximum average load of chlorinated organic substances from the production of bleached kraft pulp in each Contracting Party and on the applied analytical method,

RECOGNIZING further that the kraft pulp mills are responsible for an important part of the discharges from the pulp and paper industry into the Baltic Sea,

DESIRING to limit the discharges from this industry with best available technology, **)

DESIRING also more information about the discharges from the pulp and paper industry,

RECOGNIZING the importance of reducing the discharges of the kraft pulp industry

*) This Recommendation supersedes HELCOM Recommendation 9/6.

**) The term "best available technology" is understood to take into consideration technical and economic feasibility.

a) to minimize the hazards to human health and to the environment from toxic, persistent and bioaccumulatic substances;

b) to reduce oxygen-consuming discharges so as not to cause oxygen deficiency of any significance, nor to impair the habitat of the characteristic fish populations;

c) to reduce nutrient discharges so as not to cause eutrophication on any significance;

d) to avoid tainting, to the extent possible, of taste or smell of fish by wastewater, as well as changes in the organoleptic properties of water;

e) by developing industrial processes, in particular bleaching techniques for pulp, and treatment techniques for wastewater, and by preventing incidental effluent discharges so as to minimize the adverse effects of wastewater discharges;

f) by developing effluent treatment techniques that minimize the amount of sludge created. At the same time maximal utilization and further processing of the sludge shall be aimed at,

RECOMMENDS that the Governments of the Contracting Parties as a first step take measures to reduce the discharges from kraft pulp industry, namely

for bleached kraft pulp

g) that in the production of bleached kraft pulp within the catchment area of the Baltic Sea the load of chlorinated organic substances (AOX) should be reduced so that the specific loading from each Contracting Party's production of bleached kraft pulp from 1 January 1995 not exceeds the annual mean value of

2 kg of AOX per metric tonne of air dry bleached softwood pulp and

1 kg of AOX per metric tonne of air dry bleached hardwood pulp

or

1.4 kg of AOX per metric tonne of the Contracting Party's total production of air dry bleached kraft pulp.

The method of analysis should be SCAN-W 9:89 or DIN 38 409, part 14. Analysis shall be made on unsettled samples;

h) that the specific loading from each Contracting Party's production of bleached kraft pulp shall not exceed the annual mean value of oxygen consumption of 65 kg per metric tonne of air dry bleached kraft pulp. the oxygen consumption is determined as chemical oxygen demand using the dichromate method (COD_{Cr});

i) that biochemical oxygen demand (BOD) shall be reduced in proportion to the reduction of chemical oxygen demand (COD_{Cr}) recommended in item h);

for unbleached kraft pulp

j) in the production of unbleached kraft pulp the reduction of chemical oxygen demand (COD_{Cr}) and biochemical oxygen demand (BOD) be respective to the level recommended in items h) and i) above for production of bleached kraft pulp;

for phosphorus in the production of kraft pulp in general

k) the specific loading of phosphorus from each contracting Party's kraft pulp production shall not exceed the annual mean value of 60 g per tonne of air dry kraft pulp;

for kraft pulp in general

l) the objectives under h) - k) shall be attained by the year 2000 at mills that have started to operate before 1 January 1989, and immediately at mills which will start to operate thereafter,

RECOMMENDS further, in order to attain the objectives that the Contracting Parties

- initiate projects and investigations and arrange seminars for the exchange of information and experience, and

- take efforts to harmonize the monitoring systems for discharges and recipient control, analytical methods, and techniques for determining the toxicity of the effluents. Harmonizing methods for analysis of dioxins, suspended solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD_{Cr}) and phosphorus (P_{tot}) shall be aimed at. The comparability of the results should be secured through intercalibration exercises,

RECOMMENDS ALSO that the Contracting Parties re-evaluate before the Commission meeting in 1994 the emission limit values of the present Recommendation and reconsider them, e.g. on a "plant by plant" basis,

RECOMMENDS also that the Contracting Parties report to the Commission every three years starting from 1997.

HELCOM RECOMMENDATION 11/5

Adopted 15 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

RESTRICTION OF DISCHARGES FROM THE IRON AND STEEL INDUSTRY

THE COMMISSION,

RECALLING that according to Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention) the Contracting Parties shall take all appropriate measures to control and strictly limit pollution by noxious substances,

RECALLING ALSO that Annex II of the Helsinki Convention defines certain metals, oil and cyanide contained in industrial wastewaters as noxious substances for the purposes of Article 6 of the Convention,

RECOGNIZING that iron and steel industry is a major source of metal, oil and cyanide discharges,

RECALLING the Ministerial Declaration at the ninth meeting of the Helsinki Commission,

DESIRING ALSO more information about the discharges from iron and steel industry,

RECOGNIZING the importance of reducing the discharges from iron and steel industry

i by minimizing the hazards to human health and to the environment from toxic, persistent and bioaccumulative substances by the application of best available technology; *)

ii by developing industrial processes and in particular recycling of waters and by preventing incidental effluent discharges;

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*) The term "best available technology" is understood to take into consideration technical and economic feasibility.

iii by developing waste- and stormwater treatment techniques and reuse or further processing of the sludge and by disposing the sludge in a manner causing as little environmental hazard as possible,

RECOMMENDS to the Governments of the Contracting Parties that as a first step

a) the total discharges from iron and steel industry including related process units like sinter plant and including stormwaters and run off from sludge disposal within the catchment area of the Baltic Sea shall as soon as possible, but not later than 1995, not exceed an upper limit, varying with the annual production and calculated by multiplying total national production with specific discharge coefficients as shown below:

Type of process	Specific coefficient, g/t *)			
	SS	Oil**)	Zn	Pb
Blast furnace including sintering plant 1)	20	-	1	0.1
Open-heart furnace 1)	70	-	-	-
Converter	20	-	-	-
Electric arc furnace 1)	20	-	-	-
Continuous casting	20	5	-	-
Hot rolling	100	10	-	-
Cold rolling	50	10	-	-

b) discharges of cyanide (CN) should be restricted with best available technology, but may not exceed 0.1 mg/l in waste water from any process;

c) closed systems should be developed to circulate process water and polluted cooling water to at least 90% at each production plant,

RECOMMENDS FURTHER that the Contracting Parties re-evaluate before the Commission meeting in 1994 the emission limit values of the present Recommendation and reconsider them, e.g. on a "plant by plant" basis,

RECOMMENDS ALSO that the Contracting Parties report to the Commission every three years starting 1994.

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*) Referring to the production of each process.

**) Measured preferably by the IR-method (SFS 3010; SS 02 81 45; DEV H 17/18.4), but also other suitable methods can be used.

1) Sintering plants, open-heart furnaces and electric arc furnaces should preferably apply to gas cleaning methods which cause no discharges to water.

HELCOM RECOMMENDATION 11/6

Adopted 14 February 1990
having regard to Article 13, Paragraph b)
of the Helsinki Convention

BASIC PRINCIPLES IN WASTEWATER MANAGEMENT IN CHEMICAL INDUSTRY

THE COMMISSION,

RECALLING Article 5 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to counteract the introduction of certain hazardous substances, as specified in Annex I of the Convention, into the Baltic Sea Area,

RECALLING ALSO that according to Article 6 of the Helsinki Convention all appropriate measures to control and strictly limit pollution by noxious substances, listed in Annex II of the Convention, shall be taken, and that according to Annex III of the Convention the pollution load of industrial wastes shall be minimized,

RECALLING FURTHER that the Ministerial Declaration of the ninth Meeting of the Helsinki Commission calls for a considerable reduction of land-based pollution,

RECOGNIZING FURTHER that the chemical industry *) is responsible for an important part of the discharges of hazardous substances into the Baltic Sea,

DESIRING to limit the discharges from this industry with best available technology, **)

DESIRING ALSO to implement the HELCOM Recommendation 9/8 concerning measures aimed at the reduction of discharges from industry,

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*) cf. International Standard Industrial Classification of all Economic Activities, Stat. Papers, Series M, No. 4, Rev. 2. United Nations, New York 1968, (Appendix 1).

**) The term "best available technology" is understood to take into consideration technical and economic feasibility.

RECOMMENDS to the Governments of the Contracting Parties that they apply to chemical industries producing wastewater, which is discharged into waters or municipal sewerage systems, the following

general principles

a) low waste technology should be applied wherever possible;

b) the chemicals listed in the Appendix 2 which may reach the environment should be substituted by less harmful chemicals or subjected to requirements which will provide at least as good a result from an environmental standpoint;

c) water management in chemical factories should aim at closed water systems or at high circulating rate in order to avoid wastewater production wherever possible,

principles for wastewater handling

d) wastewaters containing substances listed in the Appendix 2 should before 1995 be separately treated before mixing with diluting waters (cooling water and low polluted wastewater). Furthermore, the treatment of the hazardous substances should be continuously improved by using best available technology for different streams with regard to the total result;

e) chemical factories producing wastewaters which contain hazardous substances should be equipped with a segregated sewerage system; one drainage system for polluted process water which must enter a suitable central treatment plant before it is mixed with non-polluted water for final discharge, and another drainage system which receives cooling water, non-polluted stormwater and possibly very low polluted wastewater. This should be applied to all plants the construction of which starts after 1990. In existing plants segregating of process water from cooling water should start before the year 2000,

RECOMMENDS ALSO that the Contracting Parties report to the Commission every three years starting in 1994 and that the list of substances (Appendix 2) should be revised by the Technological Committee, when appropriate.

STANDARD CLASSIFICATION OF CHEMICAL INDUSTRY

MANUFACTURE OF CHEMICALS AND OF CHEMICAL, PETROLEUM, COAL, RUBBER AND PLASTIC PRODUCTS

1. MANUFACTURE OF INDUSTRIAL CHEMICALS

1.1 Manufacture of basic industrial chemicals except fertilizers

Manufacture of inorganic chemicals

Manufacture of ammonia

Manufacture of sulphuric acid

Manufacture of alkalies and chlorine

Manufacture of compressed gases

Manufacture of other inorganic chemicals

Manufacture of organic chemicals

Sulphite spirit distilling

Other manufacture of organic chemicals

1.2 Manufacture of fertilizers and pesticides

Manufacture of pesticides

1.3 Manufacture of synthetic resins, plastic materials and man-made fibres except glass

Manufacture of resins and plastics

Manufacture of man-made fibres

Manufacture of rubber materials

2. MANUFACTURE OF OTHER CHEMICAL PRODUCTS

2.1 Manufacture of paints, varnishes and lacquers

2.2 Manufacture of drugs and medicines

2.3 Manufacture of soap and cleaning preparations, perfumes, cosmetics and toilet preparations

2.4 Manufacture of chemical products, not elsewhere classified

Manufacture of technochemical products

Manufacture of explosives and pyrotechnics

Manufacture of glue and casein

Manufacture of candles

Manufacture of printing, writing and other inks

Manufacture of matches

Manufacture of other chemical products

3. PETROLEUM REFINERIES

4. MISCELLANEOUS PRODUCTS OF PETROLEUM AND COAL

Manufacture of lubricating oils and greases

Manufacture of roofing felt

Other manufacture of miscellaneous products of petroleum and coal

5. MANUFACTURE OF RUBBER PRODUCTS

Tyre and tube industries

Manufacture of rubber products, not elsewhere classified

6. MANUFACTURE OF PLASTIC PRODUCTS, NOT ELSEWHERE CLASSIFIED

LIST OF SUBSTANCES REFERRED TO IN ITEM b OF RECOMMENDATION ON BASIC PRINCIPLES IN WASTEWATER MANAGEMENT IN CHEMICAL INDUSTRY

1. organohalogen compounds and substances which may form such compounds in the aquatic environment,
2. organophosphorus compounds,
3. organotin compounds,
4. substances in respect of which it has been proved that they possess carcinogenic or mutagenic properties or effect on capacity for reproduction in or via the aquatic environment,
5. mercury and its compounds,
6. cadmium and its compounds,
7. biocides and their derivatives not appearing in 1 to 6,
8. the following metalloids and metals and their compounds:

zinc	tin
copper	beryllium
nickel	uranium
chromium	vanadium
lead	cobolt
selenium	thallium
arsenic	tellurium
antimony	silver
molybdenum	

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HELCOM RECOMMENDATION 11/7

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

MEASURES AIMING AT THE REDUCTION OF EMISSIONS TO THE ATMOSPHERE FROM THE IRON AND STEEL INDUSTRY

THE COMMISSION,

RECALLING Paragraph 1 of Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

RECALLING ALSO that according to Paragraph 2 of Article 2 of the Helsinki Convention land-based pollution includes also airborne pollution,

RECALLING ALSO that according to Paragraph 8 of Article 6 of the Helsinki Convention, the Contracting Parties shall endeavour to use best practical means in order to minimize airborne pollution of the Baltic Sea Area by noxious substances,

RECALLING ALSO the Ministerial Declaration at the ninth meeting of the Helsinki Commission,

DESIRING ALSO more information about the discharges from iron and steel industry,

RECOGNIZING the importance of reducing the discharges from iron and steel industry

i) by minimizing the hazards to human health and to the environment from toxic, persistent and bioaccumulative substances by the application of best available technology; *)

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*) The term "best available technology" is understood to take into consideration technical and economical feasibility.

ii) by developing industrial processes and techniques for the collection and treatment of air emissions,

RECOMMENDS to the Governments of the Contracting Parties that

1. as of January 1st 1995 dust emissions from processes *) in the iron and steel industry should be avoided or collected and filtered before being allowed to enter into the atmosphere;

2. fugitive emissions from all processes should be avoided as far as technically feasible e.g. by encapsulation, evacuation hoods combined with good housekeeping practices;

3. fabric filters or technology environmentally equivalent should be used for dust cleaning e.g. in sintering plants, for secondary gases from blast furnaces and basic oxygen furnaces, in electric arc furnaces and at cutting and grinding operations.

   When these technologies are used the particulate matter content of the filtered gases should, as a guiding value, not exceed 10 mg/m^3 (ndg). In any case, the particulate matter content of the filtered gases should not exceed 50 mg/m^3 (ndg);

4.a low emission coke cooling techniques, preferably dry quenching, should be used for new installations and from 1995 for existing coke plants. Dust emissions in the waste gas from dry quenching shall not exceed 20 mg/m^3 (ndg). The total dust emissions from wet quenching may not exceed 20 g per tonne of coke for new plants and 50 g per tonne from existing plants;

4.b filling gases from coke plants are to be conveyed to the crude gas as far as possible. Filling gases which may not be passed on shall be burned. The emission of particulate matters in the combustion waste gas shall not exceed 25 mg/m^3 ;

4.c waste gases from coke oven pushing shall be captured and passed through a dust collector. Dust emission shall not exceed 5 g per tonne of coke;

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*) Examples of processes:

- coke plants
- sintering plants
- blast furnaces
- basic oxygen furnaces
- electric arc furnaces
- casting
- rolling, furnaces in rolling mills
- cutting

5.a as of January 1st 1992 the total emissions (fugitive emissions from charging and tapping and filtered gas) from all processes should be measured or estimated and reported;

5.b a good process and device control and regular monitoring should be maintained in order to keep emissions low. From 1997 dust emissions shall be continuously monitored if the particulate emission is 5 kg/h or more or the cadmium emission is 5 g/h or more and that installations with a particulate emission of 2 to 5 kg/h shall be equipped with measuring instruments which continuously determine waste gas opacity, e.g. optical transmission.

HELCOM RECOMMENDATION 11/8 *)

Adopted 14 February 1990, having regard
to Article 13, Paragraph c) and Article 24, Paragraph 2
of the Helsinki Convention

AMENDMENTS TO REGULATION 7 OF ANNEX IV OF THE HELSINKI CONVENTION

THE COMMISSION,

RECALLING HELCOM Recommendation 1/15 on the application of certain provisions on sewage,

RECALLING ALSO that the provisions of Regulation 7 of Annex IV of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), shall be applied to existing ships from 3 May 1990,

NOTING that Annex IV of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol 1978 relating thereto (MARPOL 73/78), will not be in force on 3 May 1990,

NOTING ALSO that Regulation 7 of Annex IV of the Helsinki Convention does not contain provisions on survey and certification,

BEING CONVINCED of the necessity to establish provisions on survey and certification of sewage treatment systems in the Baltic Sea Area in the interim period from 3 May 1990 until the entry into force of Annex IV to MARPOL 73/78,

TAKING INTO CONSIDERATION the amendment procedure for the Annexes of the Helsinki Convention as contained in Article 13, Paragraph c) and Article 24, Paragraph 2 of the Convention,

RESOLVES:

a) to adopt the amendments to Regulation 7 of Annex IV of the Convention appearing in the Annex to this Recommendation;
b) to ask the Depository Government to communicate the amendments to the Contracting Parties with the Commission's recommendation for acceptance;
c) to determine that the amendments shall be deemed to have been accepted, unless prior to 15 April 1990, any one of the Contracting Parties have objected to the amendments;
d) to determine that the accepted amendments shall enter into force on 3 May 1990.

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*) This Recommendation supersedes HELCOM Recommendation 1/15.

1. The preamble of Regulation 7 of Annex IV of the Helsinki Convention is amended to read as follows:

   "The Contracting Parties shall apply the provisions of Paragraphs A to D and F and G of this Regulation on discharge of sewage from ships while operating in the Baltic Sea Area."

2. Paragraph A of Regulation 7 of Annex IV of the Helsinki Convention is amended to read as follows:

   "A Definitions

   For the purposes of this Regulation:

   1. "Sewage" means:
      a) drainage and other wastes from any form of toilets, urinals, and WC scuppers;
      b) drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;
      c) drainage from spaces containing living animals; or
      d) other waste waters when mixed with the drainages defined above.

   2. "Holding tank" means a tank used for the collection and storage of sewage."

3. Paragraph B of Regulation 7 of Annex IV of the Helsinki Convention is amended to read as follows:

   "B Application

   The provisions of this Regulation shall apply to:

   a) ships of 200 tons gross tonnage and above;
   b) ships of less than 200 tons gross tonnage which are certified to carry more than 10 persons;
   c) ships which do not have a measured gross tonnage and are certified to carry more than 10 persons."

4. New Paragraph F to read as follows:

   "F Surveys

   1. Ships which are engaged in international voyages in the Baltic Sea Area shall be subject to surveys specified below:

      a) An initial survey before the ship is put in service or before the Certificate required under Paragraph G of this Regulation is issued for the first time, which shall include a survey of the ship which shall be such as to ensure:

(i) when the ship is equipped with a sewage treatment plant the plant shall meet operational requirements based on standards and the test methods recommended by the Commission* and shall be approved by the Administration;

(ii) when the ship is fitted with a system to comminute and disinfect the sewage, such a system shall meet operational requirements based on standards and the test methods recommended by the Commission* and shall be approved by the Administration;

(iii) when the ship is equipped with a holding tank the capacity of such tank shall be to the satisfaction of the Administration for the retention of all sewage having regard to the operation of the ship, the number of persons on board and other relevant factors. The holding tank shall meet operational requirements based on standards and the test methods recommended by the Commission* and shall be approved by the Administration; and

(iv) that the ship is equipped with a pipeline to discharge sewage to a reception facility. The pipeline should be fitted with a standard shore connection in accordance with paragraph E or for ships in dedicated trades alternatively with other standards which can be accepted by the Administration such as quick connection couplings.

This survey shall be such as to ensure that equipment, fittings, arrangements and material fully comply with the applicable requirements of this Regulation.

The Administration shall recognize the "Certificate of Type Test" for sewage treatment plants issued under the authority of other Contracting Parties.

b) Periodical surveys at intervals specified by the Administration but not exceeding five years which shall be such as to ensure that the equipment, fittings, arrangements and material fully comply with the applicable requirements of this Regulation.

2. Surveys of the ship as regards enforcement of the provisions of this Regulation shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Administration concerned fully guarantees the completeness and efficiency of the surveys.

3. After any survey of the ship has been completed, no significant change shall be made in the equipment, fittings, arrangements, or material covered by the survey without the approval of the Administration, except the direct replacement of such equipment or fittings."

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* Reference is made to HELCOM Recommendation 1/5

5. New Paragraph G to read as follows:

"G Certificate

1. A Sewage Pollution Prevention Certificate shall be issued to ships certified to carry more than 50 persons which are engaged in international voyages in the Baltic Sea Area, after survey in accordance with the provisions of Paragraph F of this Regulation.

2. Such Certificate shall be issued either by the Administration or by any person or organization duly authorized by it. In every case the Administration assumes full responsibility for the Certificate.

3. The Sewage Pollution Prevention Certificate shall be drawn up in the form corresponding to the model given in the appendix to Annex IV of MARPOL 73/78, as the Contracting Parties also being parties to MARPOL 73/78. If the language is not English, the text shall include a translation into English.

4. A sewage Pollution Prevention Certificate shall be issued for a period specified by the Administration, which shall not exceed five years.

5. A Certificate shall cease to be valid if significant alterations have taken place in the equipment, fittings, arrangement or material required without the approval of the Administration, except the direct replacement of such equipment or fittings."

HELCOM RECOMMENDATION 11/9

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

NATIONAL REGULATIONS ON THE DISCHARGE OF SEWAGE IN NATIONAL WATERS

THE COMMISSION,

RECALLING that the provisions of Regulation 7 of Annex IV of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), shall be applied to all ships from 3 May 1990,

NOTING that Annex IV of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), will not be in force on 3 May 1990,

NOTING ALSO that Regulation 7 of Annex IV of the Helsinki Convention is only effective for ships flying the flag of a Contracting Party to the Helsinki Convention,

BEING CONVINCED of the necessity to prevent the pollution of the Baltic Sea Area by sewage from ships, irrespectively of their flag,

TAKING INTO CONSIDERATION that within the territorial waters national regulations on the discharge of sewage can be taken with regard to ships, irrespectively of their nationality,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention should implement by way of appropriate national regulations the provisions of Paragraph C of Regulation 7 of Annex IV of the Helsinki Convention, relating to the discharge of sewage with respect to ships, irrespectively of nationality, sailing in their national waters.

HELCOM RECOMMENDATION 11/10

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

GUIDELINES FOR CAPACITY CALCULATION OF SEWAGE SYSTEMS ON BOARD PASSENGER SHIPS

THE COMMISSION,

RECALLING Paragraph C of Regulation 7 of Annex IV to the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), concerning the discharge of sewage,

RECALLING ALSO that the Marine Environment Protection Committee (MEPC) of IMO has adopted, at its sixth session, Resolution MEPC.2(VI) - Recommendation on International Effluent Standards and Guidelines for Performance Tests for Sewage Treatment Plants,

RECALLING FURTHER that the Commission has adopted, at its first meeting, a Recommendation concerning the application by the Baltic Sea States of guidelines for type testing and approval of sewage treatment systems,

RECOGNIZING the need for the standardization of the capacity calculation of sewage systems,

RECOMMENDS that Governments of the Contracting Parties to the Helsinki Convention should, while awaiting Guidelines approved by IMO, apply the attached Guidelines for the capacity calculation of sewage systems.

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Guidelines for capacity calculation of sewage systems on board passenger ships

These Guidelines are applicable to sewage systems to be installed in passenger ships in order to meet the requirements of the Helsinki Convention.

They deal with sewage (black water) and grey water. Sewage is defined in Regulation 7 of Annex IV of the Helsinki Convention. Effluent from kitchen, pantries, laundries, galleys, baths and showers is referred to as grey water. It is only sewage which is required to be treated in accordance with the Helsinki Convention. On many ships there is a connection between sewage and grey water systems so that in the following there is also given a calculation scheme for the combined system.

The total flushing systems used on board ships are the conventional system and the vacuum system.

The capacity calculations apply to passenger ships engaged in voyages with a length of more than 24 hours. They are based on the flow rate in litre per day per person.

	Liter per person per day	
	Conventional system	Vacuum system
Sewage (black water)	70	25
Sewage and grey water	230	185

The Administrations may alter these figures when the duration of the voyage is less than 24 hours or when other systems with small flow rates are installed.

HELCOM RECOMMENDATION 11/11

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

MEASURES TO REDUCE THE EMISSIONS OF HARMFUL CHLOROFLUOROCARBONS FROM SHIPS

THE COMMISSION,

NOTING that the Montreal Protocol on substances that deplete the ozone layer, 1987, which entered into force 1 January 1989, stipulates that the production and consumption of ozone depletion substances should be kept at their 1986 consumption level not later than 1 January 1992,

NOTING ALSO that the emission of chlorofluorocarbons (CFC/HCFCs) into the air actively contributes to the depletion of the ozone layer in the atmosphere and that this depletion may cause serious effects on the global environment,

NOTING FURTHER that reduction and final elimination of CFC/HCFCs, therefore, is of global importance,

BEING AWARE that large amounts of CFC R-12 and R-11 are consumed annually on board ships in refrigeration systems and as detergents,

BEING ALSO AWARE that there are other refrigerants presently available for use in refrigeration systems on board ships such as HCFC R-22 which only has an ozone depletion factor of 5 per cent in comparison with CFC R-12,

RECOGNIZING that the main reasons for the emission of harmful CFC/HCFCs are inappropriate design of refrigeration systems, inferior maintenance procedures and insufficient knowledge of the harmful impact on the environment of CFC/HCFCs,

RECOGNIZING ALSO that these deficiencies need to be rectified,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention cooperate within the International Maritime Organization (IMO) to promote early and effective global measures for minimizing air pollution from ships, including in particular decisions on reduction objectives and target dates, and to take actions

a) to prohibit the use of R-12/R-11 and other harmful CFCs on new ships;

b) to take steps to promote, instead, the use of HCFC R-22 or other less harmful refrigerents in marine refrigeration installations as they become available;

c) to prohibit the use of CFCs as detergents on ships; and

d) to apply the following measures in order to reduce the emission into the air of R-12, R-11 and other harmful CFCs from existing marine refrigeration installations;

   (i) to modify such installations, storage receptacles, valves and means of transferring harmful refrigerents to such installations etc. so that the emission into the air of these can be reduced;

   (ii) to require that those maintaining such installations using harmful refrigerents are capable of taking the necessary precautions to limit or eliminate emissions of such refrigerents during maintenance; and

   (iii) to require further that those responsible for the operation and maintenance of such installations are made aware of and motivated to avoid the environmental effects of CFCs.

HELCOM RECOMMENDATION 11/12

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

REDUCTION OF AIR POLLUTION FROM SHIPS

THE COMMISSION,

RECALLING the provisions of the Convention on the Protection of the Marine Environment of the Baltic Sea Area,

RECALLING ALSO the determination of the Ministers, responsible for the environmental protection of the Baltic Sea Area, to cooperate within appropriate international bodies to promote the development of environmentally sound standards of marine fuels,

BEING AWARE of the impact from polluted air on the marine environment, directly and via the atmosphere,

BEING CONVINCED that international cooperation in order to arrive at globally effective measures for minimizing air pollution from ships is the most efficient means,

EXPRESSING concern for the present state and the development of exhaust emissions, ventilation from cargo tanks and the use of substances, known to affect the ozone layer, on board ships,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention cooperate within the International Maritime Organization (IMO) to promote early and effective global measures for minimizing air pollution from ships, including in particular decisions on reduction objectives and target dates, and to take actions

a) to limit to an environmentally acceptable level as soon as possible the emission of harmful components in exhaust gases by way of:

   (i) developing suitable quality standards for heavy fuels, in particular concerning the content of sulphur, chlorine and heavy metals and including the prohibition of adding chemical wastes and;

   (ii) applying best available technology to reduce nitrogen oxides and sulphur oxides emissions as well as the emission of dust and particles;

b) to reduce as soon as possible with the intention of eliminating the use of chemical compounds on board ships which are known to affect the ozone layer, such as chlorofluorocarbons and halons;

c) to develop as soon as possible suitable measures to control the emission of hydrocarbons and other harmful vaporizing fluids.

HELCOM RECOMMENDATION 11/13 *)

Adopted 14 February 1990,
having regard to Article 13, Paragraph b)
of the Helsinki Convention

DEVELOPMENT OF NATIONAL ABILITY TO RESPOND TO SPILLAGES OF OIL AND OTHER HARMFUL SUBSTANCES

THE COMMISSION,

RECALLING the provisions of Regulation 2 of Annex VI to the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), concerning the ability of the Contracting Parties to the Convention to combat spillages of oil and other harmful substances at sea,

RECALLING ALSO the former HELCOM Recommendations 1/7 and 4/3 having dealt with the national ability to respond to oil and chemical accidents,

RECOGNIZING the need for further development of the national ability of the Contracting Parties to the Helsinki Convention to combat spillages of oil and other harmful substances,

BEING AWARE of the great value of coordinating national efforts in this respect,

BEING MINDFUL that the maximum tonnage of an oil tanker entering fully laden the Baltic Sea is up to 150 000 dwt,

RECOMMENDS that Governments of the Contracting Parties to the Helsinki Convention should, in establishing national contingency plans, aim at developing the ability of their combatting services,

a) to deal with spillages of oil and other harmful substances at sea so as to enable them:

   (i) to keep a readiness permitting the first response unit to start from its base within two hours after having been alerted;

   (ii) to reach within six hours from start any place of a spillage that may occur in the response region of the respective country;

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*) This Recommendation supersedes HELCOM Recommendations 1/7 and 4/3.

(iii) to ensure well organized adequate and substantial response actions on the site of the spill as soon as possible, normally within a time not exceeding 12 hours,

b) to respond to major oil spillages

(i) within a period of time normally not exceeding two days of combatting the pollution with mechanical pick-up devices at sea; if dispersants are used it should be applied in accordance with HELCOM Recommendation 1/8, taking into account a time limit for efficient use of dispersants; *)

(ii) to make available sufficient and suitable storage capacity for disposal of recovered or lightered oil within 24 hours after having received precise information on the outflow quantity,

c) to respond to spillages of harmful substances other than oil with suitable countermeasures:

(i) to consider hereby the provisions in Volume III of the Helsinki Commission Manual on Co-operation in Combatting Marine Pollution;

(ii) to make the necessary efforts to recover floating chemicals (floaters) with a reasonable retention time using adequate mechanical pick-up devices at sea normally not exceeding 2 days of combatting at sea; *)

(iii) to use their best endeavours in research and development activities to develop suitable techniques or methods to recover such sunken chemicals from the sea bottom if they have a long retention time without dissolving tendencies,

d) should continue with the development and improvement of the combatting services, taking into account:

(i) relevant factors such as the length and configuration of the coastline, safe haven harbour approaches, vulnerable ecological areas, probability of adverse weather conditions, ice, etc.;

(ii) that this capability should be considered in connection with the national salvage and lightening capacity; and

(iii) the targets specified above concerning oil response ability, to be reached as soon as possible and, in any case, within the early nineties;

(iv) the targets specified above concerning chemical spill response ability, to be reached as soon as possible and, in any case, before the end of the nineties.

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*) The given response time limit can also be fulfilled by agreed regional cooperation of other Contracting Parties.

LIST OF MEETINGS, SEMINARS AND WORKSHOPS UNDER THE AUSPICES OF THE HELSINKI COMMISSION AS AGREED BY THE ELEVENTH MEETING OF THE COMMISSION

6-8 March 1990 Stockholm, Sweden	Second Workshop on Baltic Marine Environment Bibliography
11 March 1990 London, Great Britain	Baltic Maritime Coordinating Meeting (BMCM) (MEPC 29)
12-14 March 1990 Stockholm, Sweden	Workshop on Long-Range Transport of Organic Pollutants
13-14 March 1990 Norrköping, Sweden	Informal expert meeting concerning operational oil drift forecasts in the Baltic Sea
20-22 March 1990 Stockholm, Sweden	Workshop to consider list of harmful substances
29-31 March 1990 Sopot, Poland	Second Meeting of Chairmen, Conveners and Co-conveners of GESPA (GESPA-CCC 2)
2-5 April 1990 Sopot, Poland	Fourth Meeting of the ad hoc Group of Experts for the Preparation of the Second Periodic Assessment (GESPA 4)
24-27 April 1990 Helsinki, Finland	Seventh Meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EGAP 7)
8-10 May 1990 Helsinki, Finland	Informal expert meeting concerning guidelines for biological investigations and follow-up studies of oil spills in the Baltic
14-18 May 1990 Lübeck, Fed. Rep. of Germany	Third Meeting of the Working Group on Reduction of Industrial Discharges (RID 3)
21-23 May 1990 Gdynia, Poland	Sixth Meeting of the ad hoc Working Group on Combatting Spillages of Harmful Substances Other than Oil (CC CHEM 6)
21-25 May 1990 Gdynia, Poland	Fifth Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (MORS 5)
31 May 1990 Denmark	Informal Working Group on joint exercises in the Baltic Sea Area
5 June 1990 Karlskrona, Sweden	12th Meeting of the Chairmen and the Secretariat of the Helsinki Commission (CASH 12)
5 June 1990 Karlskrona, Sweden	Informal Meeting of the Urban Areas Group (in conjunction with the Karlskrona Conference)

6-8 June 1990 Karlskrona, Sweden	Fifth Conference on the Health of the Seas and an informal expert meeting for consideration of proposals for revision of HELCOM Recommendation 7/4
7-8 June 1990 Karlskrona, Sweden	Informal Working Group to facilitate the implementation of the HELCOM Plan for Aerial Surveillance Co-operation
26 July - 7 August 1990 Copenhagen - Helsinki	Second Joint Multinational Cruise on Major Microbiological Parameters into the Open Baltic Sea
20-23 August 1990 Helsinki, Finland	Second Meeting of the ad hoc Working Group on Air Pollution from Ships (MC AIR)
28-31 August 1990 Visby, Sweden	Biological Intercalibration Workshop
28-31 August 1990 Visby, Sweden	Oxygen determination intercalibration coordinated by ICES
September 1990 Gdansk area, Poland	Joint HELCOM exercise on combatting of oil/chemical spills
10-14 September 1990 Copenhagen, Denmark	First Meeting of the Environment Committee (EC 1))
18-21 September 1990 Norrköping, Sweden	16th Meeting of the Maritime Committee (MC 16)
25-28 September 1990 Klaipeda, USSR	Seminar on Particularly Sensitive Sea Areas (IMO/HELCOM/IOC/UNEP)
8-12 October 1990 Lübeck, Fed. Rep. of Germany	14th Meeting of the Combatting Committee (CC 14)
22-26 October 1990 Poland	First Meeting of the Technological Committee (TC 1)
11 November 1990 London, Great Britain	Baltic Maritime Coordinating Meeting (BMCM) (MEPC 30)
20-22 November 1990 Stockholm, Sweden	Workshop on the Impact of Pollutants on the Baltic Sea (radionuclides and other genotoxic substances)

BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 1 JOINT ACTIVITIES OF THE BALTIC SEA STATES WITHIN THE FRAMEWORK OF THE CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA 1974-1978
(1979)*

No. 2 REPORT OF THE INTERIM COMMISSION (IC) TO THE BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION
(1981)

No. 3 ACTIVITIES OF THE COMMISSION 1980
- Report on the activities of the Baltic Marine Environment Protection Commission during 1980
- HELCOM Recommendations passed during 1980
(1981)

No. 4 BALTIC MARINE ENVIRONMENT BIBLIOGRAPHY 1970-1979
(1981)

No. 5A ASSESSMENT OF THE EFFECTS OF POLLUTION ON THE NATURAL RESOURCES OF THE BALTIC SEA, 1980
PART A-1: OVERALL CONCLUSIONS
(1981)*

No. 5B ASSESSMENT OF THE EFFECTS OF POLLUTION ON THE NATURAL RESOURCES OF THE BALTIC SEA, 1980
PART A-1: OVERALL CONCLUSIONS
PART A-2: SUMMARY OF RESULTS
PART B: SCIENTIFIC MATERIAL
(1981)

No. 6 WORKSHOP ON THE ANALYSIS OF HYDROCARBONS IN SEAWATER
Institut für Meereskunde an der Universität Kiel, Department of Marine Chemistry, March 23 - April 3, 1981
(1982)

No. 7 ACTIVITIES OF THE COMMISSION 1981
- Report of the activities of the Baltic Marine Environment Protection Commission during 1981 including the Third Meeting of the Commission held in Helsinki 16-19 February 1982
- HELCOM Recommendations passed during 1981 and 1982
(1982)

No. 8 ACTIVITIES OF THE COMMISSION 1982
- Report of the activities of the Baltic Marine Environment Protection Commission during 1982 including the Fourth Meeting of the Commission held in Helsinki 1-3 February 1983
- HELCOM Recommendations passed during 1982 and 1983
(1983)

No. 9 SECOND BIOLOGICAL INTERCALIBRATION WORKSHOP
Marine Pollution Laboratory and Marine Division of the National Agency of Environmental Protection, Denmark, August 17-20, 1982, Rønne, Denmark
(1983)

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* out of print

No. 10 TEN YEARS AFTER THE SIGNING OF THE HELSINKI CONVENTION
National Statements by the Contracting Parties on the Achievements in Implementing the Goals of the Convention on the Protection of the Marine Environment of the Baltic Sea Area
(1984)

No. 11 STUDIES ON SHIP CASUALTIES IN THE BALTIC SEA 1979-1981
Helsinki University of Technology, Ship Hydrodynamics Laboratory, Otaniemi, Finland
P. Tuovinen, V. Kostilainen and A. Hämäläinen
(1984)

No. 12 GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE SECOND STAGE
(1984)

No. 13 ACTIVITIES OF THE COMMISSION 1983
- Report of the activities of the Baltic Marine Environment Protection Commission during 1983 including the Fifth Meeting of the Commission held in Helsinki 13-16 March 1984
- HELCOM Recommendations passed during 1983 and 1984
(1984)

No. 14 SEMINAR ON REVIEW OF PROGRESS MADE IN WATER PROTECTION MEASURES
17-21 October 1983, Espoo, Finland
(1985)

No. 15 ACTIVITIES OF THE COMMISSION 1984
- Report on the activities of the Baltic Marine Environment Protection Commission during 1984 including the Sixth Meeting of the Commission held in Helsinki 12-15 March 1985
- HELCOM Recommendations passed during 1984 and 1985
(1985)

No. 16 WATER BALANCE OF THE BALTIC SEA
A Regional Cooperation Project of the Baltic Sea States; International Summary Report
(1986)

No. 17A FIRST PERIODIC ASSESSMENT OF THE STATE OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA, 1980-1985; GENERAL CONCLUSIONS
(1986)

No. 17B FIRST PERIODIC ASSESSMENT OF THE STATE OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA, 1980-1985; BACKGROUND DOCUMENT
(1987)

No. 18 ACTIVITIES OF THE COMMISSION 1985
- Report on the activities of the Baltic Marine Environment Protection Commission during 1985 including the Seventh Meeting of the Commission held in Helsinki 11-14 February 1986
- HELCOM Recommendations passed during 1986
(1986)*

No. 19 BALTIC SEA MONITORING SYMPOSIUM
Tallinn, USSR, 10-15 March 1986
(1986)

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* out of print

No. 20 FIRST BALTIC SEA POLLUTION LOAD COMPILATION
(1987)*

No. 21 SEMINAR ON REGULATIONS CONTAINED IN ANNEX II OF MARPOL 73/78 AND REGULATION 5 OF ANNEX IV OF THE HELSINKI CONVENTION
National Swedish Administration of Shipping and Navigation; 17-18 November 1986, Norrköping, Sweden
(1987)

No. 22 SEMINAR ON OIL POLLUTION QUESTIONS
19-20 November 1986, Norrköping, Sweden
(1987)

No. 23 ACTIVITIES OF THE COMMISSION 1986
- Report on the activities of the Baltic Marine Environment Protection Commission during 1986 including the Eighth Meeting of the Commission held in Helsinki 24-27 February 1987
- HELCOM Recommendations passed during 1987
(1987)*

No. 24 PROGRESS REPORTS ON CADMIUM, MERCURY, COPPER AND ZINC
(1987)

No. 25 SEMINAR ON WASTEWATER TREATMENT IN URBAN AREAS
7-9 September 1986, Visby, Sweden
(1987)

No. 26 ACTIVITIES OF THE COMMISSION 1987
- Report on the activities of the Baltic Marine Environment Protection Commission during 1987 including the Ninth Meeting of the Commission held in Helsinki 15-19 February 1988
- HELCOM Recommendations passed during 1988
(1988)

No. 27A GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE THIRD STAGE; PART A. INTRODUCTORY CHAPTERS
(1988)

No. 27B GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE THIRD STAGE; PART B. PHYSICAL AND CHEMICAL DETERMINANDS IN SEA WATER
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No. 27D GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE THIRD STAGE; PART D. BIOLOGICAL DETERMINANDS
(1988)

No. 28 RECEPTION OF WASTES FROM SHIPS IN THE BALTIC SEA AREA
- A MARPOL 73/78 SPECIAL AREA
(1989)

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* out of print

No. 29 ACTIVITIES OF THE COMMISSION 1988
- Report on the activities of the Baltic Marine Environment Protection Commission during 1988 including the Tenth Meeting of the Commission held in Helsinki 14-17 February 1989
- HELCOM Recommendations passed during 1989
(1989)

No. 30 SECOND SEMINAR ON WASTEWATER TREATMENT IN URBAN AREAS
6-8 September 1987, Visby, Sweden
(1989)

No. 31 THREE YEARS OBSERVATIONS OF THE LEVELS OF SOME RADIONUCLIDES IN THE BALTIC SEA AFTER THE CHERNOBYL ACCIDENT
Seminar on Radionuclides in the Baltic Sea
29 May 1989, Rostock-Warnemünde, German Democratic Republic
(1989)

No. 32 DEPOSITION OF AIRBORNE POLLUTANTS TO THE BALTIC SEA AREA 1983-1985 AND 1986
(1989)

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