### BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 29

# ACTIVITIES OF THE COMMISSION 1988

Including the Tenth Meeting of the Commission held in Helsinki 14-17 February 1989



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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

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REPORT ON THE ACTIVITIES OF THE COMMISSION DURING 1988 INCLUDING THE TENTH MEETING OF THE COMMISSION HELD IN HELSINKI 14-17 FEBRUARY 1989

#### 1. ACTIVITIES OF THE COMMISSION DURING 1988

#### 1.1 Ninth Meeting of the Commission

During the ninth 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 ninth meeting of the Commission held in Helsinki 15-19 February 1988 has been published in the Baltic Sea Environment Proceedings No.26.

Detailed information on the progress made since the ninth 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 15th meeting of the Scientific-Technological Committee (STC) was held in Norrköping, Sweden, 12-16 September 1988. Delegations from all the Contracting Parties and observers from the International Council for the Exploration of the Sea (ICES) and the World Meteorological Organization (WMO) attended the meeting. The Chairman of the Helsinki Commission, Ambassador Göte Svenson, the Executive Secretary, Commander Fleming Otzen and the Maritime Secretary, Mr. Lars G. Thorell also attended the meeting.

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 on the HELCOM Recommendations pertaining to the STC field, adopted by the Commission. The Delegations also submitted recent information on the action taken with respect to exceptional blooms of plankton algae in the spring of 1988, as well as deaths of seals in the North Sea Area, the Kattegat, the northern entrances to the Baltic Sea Area and the western Baltic in the summer of 1988. 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 WMO informed the meeting on relevant activities of WMO of possible interest to the STC.

The meeting identified the need for establishing an early warning system for abnormal environmental situations, and decided to submit a draft HELCOM Recommendation concerning abnormal situations in the marine environment, for the consideration of HELCOM 10. The meeting, however, expressed the view that the early warning system must be further elaborated, and decided to consider the question at the next STC meeting.

#### 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 and intercalibration exercises. 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. The Committee decided to submit a draft HELCOM Recommendation for the consideration of HELCOM 10, concerning assessments of the effects of pollution on the coastal areas.

#### 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 development of the reporting system for HELCOM data on radioactive substances.

The STC endorsed the proposals by the group MORS, e.g. that in addition to the preprint copy of the status report on the radiation situation in the Baltic Sea in 1986, the document which will be published by the Commission in 1989 should also include other relevant evaluation papers.

The Committee also considered questions regarding forms, which should be used in the submission of the environmental data as well as release data of radioactive substances, and format to be used for collecting information on the national implementation of HELCOM Recommendation 8/1 concerning monitoring of radioactive substances. The STC decided to submit for the adoption by the Commission complementary guidelines to be used in relation to this HELCOM Recommendation.

#### Airborne Pollution

The Committee considered the report of the fifth meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EGAP). The meeting noted with appreciation that cooperation with the relevant international organizations had been intensified, and endorsed the proposals made by the group.

The meeting proposed that the evaluation of the airborne deposition data of 1986 be published in the same publication as the evaluation report of the data of 1983-1985, which is now available as a preprint copy. The decision to publish it in the Baltic Sea Environment Proceedings (BSEP) has been taken by the Commission.

The Committee also proposed that a data base be established for the HELCOM airborne pollution data; the base is to be hosted by ECE using EMEP facilities and to provide evaluations as appropriate for the use of the Commission.

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 and the format which should be used for collecting of information on the implementation of HELCOM Recommendation 7/1 concerning monitoring of airborne pollution data.

The meeting also considered the future actions to be taken in relation to the reduction of airborne pollution and the establishment of an appropriate emission data base.

#### Control and limitation of discharges

The STC considered the outcome of the eleventh meeting of the Working Group on Criteria and Standards for Discharges of Harmful Substances into the Baltic Sea Area (WGS) as well as additional information provided by the Contracting Parties on matters related to the work of the WGS.

Following the procedure of the STC of utilising the Lead Country principle in dealing with harmful substances and various branches, Sweden undertook to act as Lead Country on dioxins and Finland as Lead Country on seals.

The Committee considered compilations of information by the Contracting Parties on dumping of dredged spoils and on rules applied by the Baltic Sea States; the consideration of which will be continued at the next WGS meeting.

The meeting further considered the state of the preparation of reporting forms to be used by national authorities on the implementation of HELCOM Recommendations adopted by the Commission in the STC field. Progress reports based on the information to be provided by the Contracting Parties according to the decisions of the Commission, will be considered at the meetings of the Commission and its subsidiary bodies.

#### Industrial Discharges

The Committee was informed on the status of the activities related to the work of the ad hoc Working Group on Reduction of Industrial Discharges (RID), the first session of which was held as a part of WGS 11. Activities started are dealing with restriction of discharges from the pulp and paper industry, iron and steel industry and chemical industry, the branches for which the Lead Country principle is applied as agreed by the Commission (Sweden, Finland and the Federal Republic of Germany, respectively).

#### Pollution Load Compilation

The Committee considered the outcome of the project concerning the preparation of guidelines to be used in preparation of the Second Pollution Load Compilation, which was chaired by the USSR. The meeting decided to submit for adoption by the Commission a draft HELCOM Recommendation concerning the guidelines and reporting form to be used by all Contracting Parties in collecting the discharge data in 1990.

#### Other activities in the field of the STC

The Committee also considered questions related to the follow-up of the implementation of the Ministerial Declaration, adopted by the ninth meeting of the Commission, as well as implementation of the existing Recommendations in the STC field. It was noted that a reporting system could be established for collecting information on the implementation of most of the

Recommendations adopted by the Commission in the STC field. Plans for further steps were considered, and the reporting upon all relevant parts of the Declaration concerning STC activities will be considered at the next meeting of the STC.

The Committee was further informed on other relevant actions, e.g. those taken in running the HELCOM Bibliography in the on-line data base.

#### 1.3 Maritime Committee (MC)

The Maritime Committee held its 14th meeting in Aalborg, Denmark, 10-14 October 1988. Delegations from all the Contracting Parties attended the meeting. The Executive Secretary of the Commission, Commander Fleming Otzen and the Technological Secretary, Mr. Vassili Rodionov also attended the meeting.

 ${\tt Mr.}$  Rudolf Lammel of the German Democratic Republic, Vice-Chairman of the MC, acted as Chairman of the meeting and Mr. Lars G. Thorell, the Maritime Secretary of the Commission, acted as Secretary of the meeting.

#### Reception Facilities

The Committee considered the results of the deliberations at the first meeting of the Informal Working Group on Reception Facilities (MC REFAC) and agreed to three draft HELCOM Recommendations relating to reception of wastes based on the outcome of the work within MC REFAC for submission to HELCOM 10.

The Committee agreed that a seminar on reception facilities could be useful both for further exchange of views among the Baltic Sea States and also as a way to inform other regions on the experiences from the Baltic Sea Area. The Committee was of the opinion that the seminar should be open for participation by representatives from the shipping industry and from national administrations in the Baltic Sea States and to such representatives from other regions.

The Committee further discussed why the reporting formats on inadequcy of reception facilities were not known by the shipmasters. In order to encourage the shipmasters to use the reporting formats all Delegations undertook to contact the shipowners' and shipmasters' organizations.

The Committee made the final completions to the national chapters in the booklet "Reception of Wastes in the Baltic Sea Area - a MARPOL 73/78 Special Area" to be published in the Baltic Sea Environment Proceedings before the end of 1988.

#### Matters Related to Discharges from Ships

The Committee discussed the need for amendments to Regulation 7 of Annex IV of the Helsinki Convention and elaborated a draft HELCOM Recommendation concerning amendments to Regulation 7 of Annex IV of the Helsinki Convention and a draft HELCOM Recommendation concerning sewage pollution prevention certificate.

The Committee reconsidered a proposal from the Federal Republic of Germany on amendments to the form of Oil Record Book as contained in MARPOL 73/78. The Committee agreed to the proposal and requested the Federal Republic of Germany to submit the proposed amendments to MEPC 27 on behalf of the Baltic Sea States.

#### Air Pollution from Ships

On the basis of a submission by Denmark on experiences gained in investigations on air pollution from ferries and information from Sweden on national activities in the field of air pollution from ships the Committee considered possible initiatives relating to air pollution from ships.

Taking into consideration the Ministerial Declaration's wording relating to the development of international standards for marine fuel oils the Committee decided to work on the subject in more detail with the aim of making a common approach in IMO by the Baltic Sea States.

#### Control Measures and Investigation of Violations

The Committee exchanged national information concerning airborne surveillance and noted the deterrence of the potential polluters of the sea and the reduction of oil pollution that can be observed in regions of the Baltic Sea, which are surveilled by aircraft with remote sensing capabilities. The Committee further agreed to a draft HELCOM Recommendation concerning cooperation in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations. The Recommendation contains amended guidelines for this cooperation to supersede the present guidelines contained in HELCOM Recommendation 6/13.

#### Traffic Under Winter Conditions

The Committee was informed by Finland that the national committee on this subject had concluded its work, but the final results were still under consideration. For the time being two main results have emerged. Firstly, it is not deemed appropriate to suggest any mandatory constructional alterations to tankers; secondly, a reduction in the navigational fees is under consideration for tankers with double bottoms and double sides.

#### Research and Development

The Committee also discussed research and development projects in accordance with the Long-Term Work Plan and the Contracting Parties were requested to submit information to MC 15 on these projects.

#### Cooperation within IMO

The Committee decided to continue the coordination of certain specific subjects between the Baltic Sea States within IMO and to further discuss such coordination at the Baltic Maritime Coordinating Meetings (BMCM) to be held in conjunction with MEPC.

The Committee agreed on the need to scrutinize certain IMO decisions of relevance to the MC work. This scrutiny should include a detailed evaluation of existing IMO documents, such as relevant assembly resolutions, MEPC resolutions and MEPC circulars.

The Committee stressed the importance of the further work to expand the recommendation on the ban of the use of tributyl-tin (TBT) compounds in anti-fouling paints to cover also larger ships. The Committee decided to take the outcome of MEPC 27 into consideration and consider this item further at MC 15.

The Committee discussed the importance of defining Particularly Sensitive Sea Areas for the Baltic Sea Area and expressed its support for having a seminar on the subject. The USSR offered to host a seminar on Particularly Sensitive Sea Areas in 1990 in Klaipeda.

#### 1.4 Combatting Committee (CC)

The Combatting Committee held its 12th meeting in Turku, Finland, 24-28 October 1988. Delegations from all the Contracting Parties and an observer from the International Maritime Organization (IMO) attended the meeting. The Executive Secretary of the Commission, Commander Fleming Otzen, and the Scientific Secretary, Ms. Terttu Melvasalo also attended the meeting.

Commodore Sven Uhler of Sweden, Chairman of the CC, acted as Chairman of the meeting and Commander Preben Stamp of Denmark, Vice-Chairman of the CC, acted as Vice-Chairman of the meeting. Mr. Lars G. Thorell, the Maritime Secretary of the Commission, acted as Secretary of the meeting.

# Spillages in the Baltic Sea Area of Oil and Other Harmful Substances

The Committee considered the national summaries of spillages for the calendar year 1987 and observed the decline of oil pollution from ships in the regions of the Baltic Sea Area which are surveilled by aircraft with remote sensing capabilities.

The Committee held the opinion that the form used for reporting on national summaries of spillages did not fully present the expected information to fulfil the request in the Ministerial Declaration to estimate the total charge of pollutants entering the Baltic Sea Area from different sources, nor did the form contain sufficient information for the evaluation of the effectiveness of using aerial surveillance. A new format was accepted by the Committee and all Delegations undertook to submit filled-in forms for the calendar year 1988 and, if possible, with maps indicating the location of the different types of spills.

The Committee discussed a preliminary proposal, submitted by Finland, containing guidelines for scientific investigations to be initiated in oil spill situations in the Baltic. The Contracting Parties were requested to comment on the proposal and Finland undertook to submit a revised proposal to cc 13.

#### Research and Development

The Committee considered a document prepared by the Federal Republic of Germany on the application of dispersants in the Baltic. The Committee agreed to the conclusions in the document that it was premature to decide on a ranking scheme with an approved list of dispersants.

The Committee was informed on the ongoing and planned projects concerning oil combatting especially in winter conditions and decided to establish a list of projects for future cooperation between the Contracting Parties.

The Delegations of Finland and Sweden agreed upon cooperation in projects relating to the development of suitable and effective means and methods to combat spillages of oil and other harmful substances under cold weather and ice conditions.

#### Activities within Other Organizations

The Committee received information on the activities within the Bonn and the Copenhagen Agreements and the planned widening of the scope of the Copenhagen Agreement to encompass also combatting of chemical spills at sea. The Contracting Parties to the Helsinki Convention will be invited to participate with strike teams in the 1989 operational exercise, which will be arranged by the Copenhagen Agreement at Kristiansand, Norway.

The Committee was informed on the bilateral agreement between the Governments of Finland and the USSR on cooperation in combatting pollution of the Baltic Sea by oil and other harmful substances in emergency situations. The Committee was also informed on the bilateral agreement between Denmark and the German Democratic Republic on cooperation in combatting pollution of the Baltic Sea caused by harmful substances.

The Committee held the opinion that the cooperation with IMO could be strengthened by inviting observers from other regions to take part in workshops and operational exercises within the Helsinki Commission context.

# Combatting Spillages of Harmful Substances other than Oil

The Committee considered the report of the fourth meeting of the ad hoc Working Group on Combatting Spillages of Harmful Substances Other than Oil (CC CHEM) and endorsed the actions taken by the Working Group, inter alia, the analyses of the transportation pattern and risk assessments and the work plan for finalization of Volume III of the Combatting Manual.

The Committee decided to reconvene CC CHEM for a fifth meeting in Rostock, the German Democratic Republic, from 30 May to 1 June 1989, and the Committee also agreed on a list of substantive items for that meeting.

The Committee felt a need for a new HELCOM Recommendation to replace HELCOM Recommendations 1/7 and 4/3 and a draft Recommendation concerning the development of national ability to combat spillages of oil and other harmful substances to replace the above Recommendations was preliminary considered by the **Committee**. The Committee decided to comment on the draft Recommendation intersessionally in order to finalize the draft Recommendation at its next meeting.

#### Exercises

The Committee considered the results of the combined BALEX BRAVO/DELTA/DENGER exercise initiated by the Federal Republic of Germany in April 1988. The exercise was a combination of a multilateral communication exercise and an operational exercise.

The Committee further considered the results of the oil combatting exercise "Lysekil 88". The exercise was arranged by Sweden according to the Copenhagen Agreement. Invitations to participate were presented also to the Contracting Parties to the Helsinki Convention and Poland and the USSR participated with strike teams.

The Committee decided that the annual communication exercises should be performed on a multilateral basis following the Lead Country principle in alphabetical order.

The Committee further decided that a joint combatting exercise should be arranged in October 1989 in the southern part of the Baltic Proper in conjunction with the POLREP 89 exercise.

According to the proposal made by the Combatting Committee at its eleventh meeting the Finnish and Soviet oil combatting authorities arranged a joint combatting exercise in connection with the 12th meeting of the Combatting Committee. Due to the adverse weather conditions the exercise was concentrated on a communication exercise combined with an equipment exercise in the harbour of Hanko.

#### Other Activities in the Field of the CC

The Committee was informed by Denmark on caught war gas ammunition and the disposal thereof in accordance with the decision taken by the Helsinki Commission at its ninth meeting. The Committee decided to continue with this item during the coming meetings. Denmark offered to organize a working group meeting as soon as more information is available from the other Contracting Parties.

The Committe considered a draft HELCOM Recommendation concerning measures to minimize pollution from offshore installations but agreement could not be reached on response time for oil retaining measures. The Committee, however, decided to submit the draft Recommendation for further consideration by HELCOM 10.

The Committee emphasized the need for cooperation between the Committees of the Helsinki Commission and between the STC and the CC especially on a draft HELCOM Recommendation on abnormal situations in the marine environment.

The Committee identified the items in the Ministerial Declaration that were of special concern for the CC, i.e. to combat spillages of oil and other harmful substances under cold weather and ice conditions, to develop and establish airborne surveillance with adequate sensor systems and to establish guidelines concerning measures to minimize and combat accidental spillages from offshore installations and decided to continue and, if possible, to further intensify the work within these fields.

#### ADMINISTRATION OF THE COMMISSION DURING 1988

Ambassador Göte Svenson and Ms. Eva Smith of Sweden took office as Chairman and Vice-Chairman of the Commission, respectively, as from 1 July 1988 for the coming two year period.

Professor Harald Velner acted as Executive Secretary until 31 July 1988 and was succeeded by Commander Fleming Otzen as from 1 August 1988. Ms. Terttu Melvasalo acted as Scientific Secretary and Commander Fleming Otzen as Maritime Secretary (until 31 July 1988). Mr. Lars G. Thorell took up his duty as Maritime Secretary and Mr. Vassili Rodionov as Technological Secretary on 1 August 1988. The other members of the staff of the Commission were assistants Ritva Kostakow-Kämpe, Teija-Liisa Lehtinen, Leena Heikkilä, Doris Aghazarian (as from 1 August 1988) and Håkan Blomberg.

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 distribution of expenses of the Commission during the fiscal year from 1 July 1987 to 30 June 1988 was approximately as follows:

Meetings			456	000
Salaries		1	350	000
Other administration		1	044	000
Consultant Services			235	000
Publications			115	000
Total	FIM	3	200	000

The Executive Secretary was Secretary General of the Ninth Meeting of the Commission and conducted the work of the Secretariat.

The meetings of the STC and the MC were held in Norrköping, Sweden and Aalborg, Denmark, respectively. The meeting of the CC was held in Turku, Finland. 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 eighth meeting of the Chairmen of the Commission and its subsidiary bodies and representatives of the Secretariat (CASH) was organized with the help of national authorities in Karlskrona, Sweden, 10 June 1988, in conjunction with the Fourth Karlskrona Conference on the Health of the Seas.

The meeting, in which also the coming Chairman of the Commission participated, discussed matters related to the work of the Committees, interalia, 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 ninth meeting of CASH, in which also representatives from the Finnish Ministry of the Environment participated, was held in the Helsinki Commission Secretariat, 24-25 November 1988. The meeting primarily discussed matters related to preparations for the 10th meeting of the Commission.

In conjunction with MC 14 the Executive Secretary paid a visit to the Danish Minister for the Environment as well as the Director General of the National Agency of Environmental Protection to discuss matters related to the continued support by Denmark of the work within the Helsinki Commission context.

Upon the invitation from the USSR State Committee for Environment Protection the Chairman of the Commission and the Executive Secretary visited Moscow 16-17 January 1989. Matters of mutual interest related to environment protection in the framework of the Helsinki Commission were discussed with representatives of the State Committee as well as the Marine Pollution Control Administration of the Ministry of Merchant Marine.

The Polish Minister of Environment Protection and Natural Resources, Dr. Josef Koziol, invited the Chairman of the Commission and the Executive Secretary to pay a visit to Warsaw 18-19 January 1989. The Chairman and the Executive Secretary had the opportunity to discuss with the Minister and with representatives of the Ministry of Environmental Protection and Natural Resources, the Ministry for Foreign Affairs, the Ministry of Industry and the Ministry of Transport, Shipping and Communication matters concerning the

present and future activities of the Helsinki Commission as well as to exchange views of issues being of mutual interest.

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

- the Fifth Meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EGAP), Gdynia, Poland, 25-29 April 1988;
- the Eleventh Meeting of the Working Group on Criteria and Standards for Discharges of Harmful Substances into the Baltic Sea Area (WGS), Hamburg, the Federal Republic of Germany, 9-13 May 1988;
- the Third Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (MORS), Hamburg, the Federal Republic of Germany, 17-20 May 1988;
- the First Meeting of the Chairman, Conveners and Co-conveners of the ad hoc Group of Experts for the Preparation of the Second Periodic Assessment (GESPA CCC), Helsinki, 13-14 June 1988);
- the Second Meeting of the ad hoc\_Group of Experts for the Preparation of the Second Periodic Assessment (GESPA), Kiel, the Federal Republic of Germany, 6-9 September 1988;
- the 15th Meeting of the Scientific-Technological Committee (STC), Norrköping, Sweden, 12-16 September 1988 (together with the Technological Secretary).

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 Informal Working Group on Reception Facilities (MC REFAC), Helsinki, Finland, 3-6 May 1988,
- the 4th meeting of the <u>ad hoc</u> Working Group on Combatting Spillages of Harmful Substances Other than Oil (CC CHEM), Copenhagen, Denmark, 6-8 June 1988,
- the 2nd meeting of the Baltic Maritime Co-ordinating Meeting (BMCM), MEPC, London, United Kingdom, 4 September 1988,
- the 14th meeting of the Maritime Committee (MC), Aalborg, Denmark, 10-14 October 1988,
- the 12th meeting of the Combatting Committee (CC), Turku, Finland, 24-28 October 1988.

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.

Mr. Janusz Gasiorowski, Head of the Maritime Law Department in the Maritime Institute in Gdansk, Poland, made the necessary preparations and Mr. Jerzy Mloynarczyk, Director of the Maritime Institute in Gdansk, Poland, acted as Chairman of the Fifth Informal Expert Workshop on Article 17 of the Helsinki Convention which was held in Gdansk, Poland, on 30 June 1987 - 1 July 1988.

#### Publications and Data

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

No. 26 Activities of the Commission 1987; Including the Ninth Meeting of the Commission held in Helsinki 15-19 February 1988

- No. 27 Guidelines for the Baltic Monitoring Programme for the Third Stage as follows:
  - No. 27A Part A; Introductory Chapters
  - No. 27B Part B; Physical and Chemical Determinands in Sea Water
  - No. 27C Part C; Harmful Substances in Biota and Sediments
  - No. 27D Part D; Biological Determinands

Preprint copies (grey carton covers) of planned BSEP volumes, suitable for citing in open literature, were distributed as follows:

- Radiation Situation in the Baltic Sea in 1986, in Sea Water and Sediments
- Deposition Estimates to the Baltic Sea Area based on reported data for 1983-1985.
- The Baltic Sea Pollution Load Monitoring Symposium, Tallinn, USSR, 5-9 April 1988

The Baltic Marine Environment Bibliography for the year 1986 was distributed to the Baltic Sea States on microfiches in October 1988.

The existing Baltic Monitoring Programme data was submitted to the Contracting Parties on magnetic tapes and microfiches in October 1988, as well as graphic presentations of 1986 hydrographic and chlorophyll data from selected stations according to the agreement between the Commission and the consultant.

Furthermore, data submitted by the Contracting Parties on airborne pollution and radioactive substances have been distributed during 1988.

#### Cooperation with other International Organizations

The following organizations were observers of the Commission during 1988:

- 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)

In addition to the representation of the observer organizations at the ninth meeting of the Commission, a representative of ICES and a representative of WMO attended the 15th meeting of STC. A representative of the Paris Commission, a representative of WMO and a representative of ECE attended the fifth meeting of EGAP. Furthermore, representatives of IAEA and its Monaco Laboratory attended the third 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 second meeting of GESPA. A representative of IMO attended the 12th meeting of CC and the first meeting of MC REFAC.

The Commission was represented by Mr. Pekka Niskanen of Finland at the 14th session of the International Baltic Sea Fishery Commission (IBSFC) in Warsaw, Poland, in September 1988, by Ms. Satu Nurmi of Finland at the 15th meeting of the Standing Advisory Committee for Scientific Advice (SACSA) of the Oslo Commission in Espoo, Finland, in March 1988, by Dr. Jiirgen Pankrath of the Federal Republic of Germany at the sixth meeting of the Working Group on the Atmospheric Input of Pollutants (ATMOS) of the Paris Commission, in Paris, France in November 1988.

The Executive Secretary represented the Commission at the Fourth Karlskrona Conference on the Health of the Seas, Karlskrona, Sweden, 7-9 June 1988, at the 10th Meeting of the Paris Commission in Lisbon, Portugal, 15-17 June 1988, at the International Scientific Symposium on Death of Seals and Growth of Algae in the North and Baltic Seas, Bonn, Federal Republic of Germany, 23-24 June 1988, at the Seminar for Peace — for Nuclear Free and Living Baltic Sea — 14 July 1988 in Bomarsund, Finland and at the 20th Anniversary Symposium of the Bilateral Cooperation between Finland and the USSR within the working group for the Protection of the Gulf of Finland, Tallinn, USSR, 18-20 September 1988.

The Executive Secretary visited the International Oceanographic Commission (IOC), Paris, France, as well as the International Council for the Exploration of the Sea (ICES), Copenhagen, Denmark for discussion of practical matters relating to the cooperation between these organizations and the Helsinki Commission.

The Scientific Secretary represented the Commission in the Seminar and the informal Expert Meeting on the Pollution Load in Tallinn, USSR, 5-9 April 1988, in the Seminar on Nutrients in Karlskrona, Sweden, 7-9 June 1988, in the Symposium on the Gulf of Finland in Tallinn, USSR, 18-23 September 1988, and in the ICES Statutory Meeting in Bergen, Norway, 6-11 October 198%.

The Maritime Secretary represented the Commission at the 26th session of IMO's Marine Environment Protection Committee (MEPC) in London, United Kingdom, 5-9 September 1988, as well as in the XVIII meeting of the Contracting Parties to the Copenhagen Agreement in Vaasa, Finland, from 30 August to 1 September 198% and at the Copenhagen Agreement oil combatting exercise, Lysekil 88, from 31 May to 2 June 198%. The Maritime Secretary participated also in the seminar on risk analysis and damage assessment for spills of oil and other harmful substances, which was held in Copenhagen, Denmark, 14-18 March 1988.

The Technological Secretary represented the Commission at the Third Meeting of the Working Group on Nutrients of the Paris Commission in the Hague, the Netherlands, 24-27 October 198%.

#### 3. TENTH MEETING OF THE COMMISSION, 14-17 FEBRUARY 1989

The Helsinki Commission held its tenth meeting in Helsinki from 14 to 17 February 1989. 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), Oslo and Paris Commissions (OSCOM/PARCOM) and World Meteorological Organization (WMO). The meeting was further attended by the non-governmental international organization Greenpeace International. The meeting was chaired by the Chairman of the Commission, Ambassador Göte Svenson from Sweden. Commander Fleming Otzen, Executive Secretary of the Commission acted as Secretary General of the meeting.

The Commission considered and decided upon matters within the technological, scientific, 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 <u>ad</u> hoc working groups and informal expert meetings.

#### HELCOM Recommendations adopted by the tenth meeting of the Commission

The Commission adopted four HELCOM Recommendations related to the field of the Scientific-Technological Committee (STC), concerning:

- abnormal situations in the marine environment (10/1);
- assessments of the effects of pollution on the coastal areas of the Baltic Sea (10/2):
- monitoring of radioactive substances (10/3);
- pollution load compilation (10/4).

Furthermore, the Commission adopted five  $\tt HELCOM$  Recommendations related to the field of the Maritime Committee (MC), concerning:

- guidelines for the establishment of adequate reception facilities in ports (10/5):
- application by the Baltic Sea States of a Helsinki Convention form for reporting alleged inadequacy of reception facilities for sewage (10/6);
- general requirements for reception of wastes (10/7);
- co-operation in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations (10/8);
- amendment to regulation 8 of Annex IV of the Helsinki Convention (10/9) and one HELCOM Recommendation related to the field of the Combatting Committee (CC) concerning measures in order to minimize pollution from offshore installations (10/10).
- All Recommendations adopted by the tenth 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 1989-90 of the order of FIM 4.2 million.

The Commission took note of the information provided by all the Baltic Sea States on their plans for the implementation of the Ministerial Declaration adopted by the Commission at its ninth meeting. When informing on the plans for the national fulfillment of that part of the Declaration which requires special efforts and resources of the States relating to the reduction of nutrients, heavy metals and toxic organic substances by 50% not later than 1995 all countries stated that relevant actions had already been taken in order to accomplish the targets set by the Commission.

To intensify the work of the Commission in the reduction of discharges from land-based sources, e.g., from certain heavily polluting industries, urban areas and agriculture, the Commission agreed to establish a separate Technological Committee to deal with these matters. The Executive Secretary was requested to elaborate in consultation with the Chairman and the Vice-Chairmen of the Scientific-Technological Committee (STC) a detailed proposal for the division of the work of the present STC between the two new Committees, the Scientific Committee (SC) and the Technological Committee (TC).

The proposal should be submitted for consideration by the forthcoming meetings of the working group on criteria and standards, WGS, and the STC in order to enable the Secretariat to submit draft terms of reference for the two Committees for consideration by the eleventh meeting of the Commission in 1990.

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The Commission decided to establish an <u>ad hoc</u> working group under the Maritime Committee (MC) to advise the Commission on matters related to air pollution from ships. The Commission also decided to establish the existing informal workshop on Article 17 of the Helsinki Convention as an <u>ad hoc</u> group of legal experts which, i.a., should consider and make proposals for international regulations on liability for damage caused by pollution from offshore operations as a matter of priority.

The Commission requested the Executive Secretary to study — in consultation with the present bodies of the Commission — how the Committees could act in a more flexible and independent way in matters related to decisions on purely technical matters as well as to explore if and how more binding and stringent measures in the field of prevention and control could be achieved by introducing further technical provisions in the Annexes to the Convention.

When considering matters related to the relations with other international organizations the Commission held the view that based on the experience gained from cooperation with other international organizations it would be of value for future cooperation that the common aims and topics for such cooperation should be clearly spelled out. The Secretariat was requested to carry out a study to this effect and to submit the results of the study for the consideration by the Committees.

The Commission felt that closer links between the ongoing work in the North Sea and within the Baltic Sea, than at present, should be established and the Secretariat was requested to investigate, as a first step, the possibilities for convening a meeting between the Secretariats of the Oslo and Paris Commissions, the International Council for the Exploration of the Sea (ICES) and the Helsinki Commission.

The Commission decided to grant observership status to the Intergovernmental Oceanographic Commission (IOC) on a reciprocal basis as the Commission considered that the two Commissions could contribute to each others work on certain matters of common interest especially in the field of monitoring and assessment.

The Commission adopted guidelines on granting observer status to non-governmental international organizations to the Helsinki Commission as well as decided on amendments to the Rules of Procedure of the Helsinki Commission to cover also the acceptance of non-governmental international organizations as observers.

The Commission decided to give observer status to Stichting Greenpeace Council, Greenpeace International according to the adopted guidelines for granting observer status to non-governmental international organizations.

#### Matters related to the Scientific-Technological Committee (STC)

The Commission approved the report of the 15th meeting of the STC in general. The substantive items from the report are described in detail under Chapter 1.2 of this Report.

When considering the report of the STC, the Commission e.g. decided to elaborate the early warning system on the basis of HELCOM Recommendation 10/1. The Commission endorsed the actions related to collecting, processing and evaluating of data related to monitoring of the Baltic Sea, airborne pollution and radioactive substances. The Commission adopted HELCOM Recommendation 10/3 concerning monitoring of radioactive substances. The

airborne pollution monitoring data base was decided to be established with ECE using EMEP facilities. The Commission also decided that the next evaluation of airborne load be prepared in order to facilitate comparison of total pollution load to the Baltic Sea. The Commission adopted a Recommendation concerning evaluation and reporting of the state of coastal areas, as HELCOM Recommendation 10/2.

The Commission endorsed the action taken by the STC for the preparation of new HELCOM Recommendations regarding reduction of discharges from land-based sources (urban areas, agriculture, industry, etc.).

The Commission decided to compile the Second Pollution Load Compilation on the basis of national discharge data to be collected during 1990, and adopted for this purpose HELCOM Recommendation 10/4. The Commission endorsed the actions related to the establishment of a harmonised procedure for reporting of national implementation of the Ministerial Declaration adopted by the ninth meeting of the Commission as well as for all HELCOM Recommendations adopted by the Commission in the field of the STC.

The Commission also welcomed the information related to action taken with regard to joining the HELCOM Bibliography in the international on-line system as well as action by experts nominated by the Baltic Sea States to prepare the next comprehensive evaluation of the state of the Baltic Sea.

#### Matters related to the Maritime Committee (MC)

The Commission approved the report of the 14th 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 recommendations related to reception of wastes and appreciated the offer by Finland to arrange a seminar on reception facilities in spring 1991 for further exchange of views among the Baltic Sea States and also to inform other regions on the experiences from the Baltic Sea Area.

The Commission endorsed the opinion held by MC 14 that the use of bunker tanks for ballasting purposes had almost been abolished and therefore decided that HELCOM Recommendation 1/12 concerning standard discharge connections could be transferred to Category 3 — Recommendations no longer valid or accomplished.

As an outcome of an informal working group meeting on air pollution from ships, held in Norrköping, Sweden, 14-15 December 1988, and taking into consideration the Ministerial Declaration's (1988) wording "to cooperate within international bodies to promote the development of environmentally sound standards of marine fuels" the Baltic Sea States agreed on a common approach in IMO (MEPC 27) to reduce air pollution from ships.

The Commission decided that an ad hoc Working Group on Air Pollution from Ships be established under the auspices of the Maritime Committee and approved the terms of reference for the Working Group.

When considering draft HELCOM Recommendations concerning amendments to Regulation 7 of Annex IV of the Helsinki Convention and concerning sewage pollution prevention certificate the Commission had doubts whether the draft Recommendations were yet ripe for approval, and the Commission, therefore, requested the Committee to reconsider the draft Recommendations on this subject for approval by the next meeting of the Commission.

The Commission appreciated the invitation by the USSR to host a seminar on Particularly Sensitive Sea Areas to be held in 1990 in Klaipeda in cooperation with the International Maritime Organization (IMO), the Intergovernmental Oceanographic Commission (IOC) and the Helsinki Commission.

#### Matters related to the Combatting Committee (CC)

The Commission approved the report of the 12th meeting of the Combatting Committee in general. The substantive items from the report are described in detail under Chapter 1.4.

When considering the substantive items emerging from the report the Commission, inter alia, noted the positive trends in organizing and performing joint operational exercises. The Commission further noted the invitation from the Copenhagen Agreement concerning a joint operational exercise at the end of May in the Skagerrak and another invitation from Sweden concerning a joint combatting exercise in conjunction with the annual POLREP exercise in the southern part of the Baltic Proper in October 1989.

The Commission endorsed the opinion of the Committee that attendance of representatives from developing countries as observers at Helsinki Commission combatting exercises and at workshops under the auspices of the CC would be of great help to further global cooperation.

The Commission concurred with the proposal by the Committee to postpone the consideration of a draft HELCOM Recommendation concerning development of national ability to combat spillages of oil and other harmful substances to its next meeting.

The Commission decided that the analysis of transportation patterns for chemical tankers and related environmental hazards should be published in the Baltic Sea Environment Proceedings. The Commission further decided to publish Volume III - Response to chemical spills - of the Combatting Manual as soon as possible.

The Commission took note of the decision by the Committee to establish a list of research and development projects for future cooperation between the Contracting Parties.

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### LIST OF HELCOM RECOMMENDATIONS PASSED DURING 1988\*) AND 1989

#### Recommendation 9/1

Recommendation concerning protection of seals in the Baltic Sea Area

- adopted 15 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### Recommendation 9/2

Recommendation concerning measures aimed at the reduction of discharges from urban areas by the use of effective methods in wastewater treatment

adopted 15 February 1988, having regard to Article 13, Paragraph b)
 of the Helsinki Convention

#### Recommendation 9/3

Recommendation concerning measures aimed at the reduction of nutrient discharges from agriculture

adopted 15 February 1988, having regard to Article 13, Paragraph b)
 of the Helsinki Convention

#### Recommendation 9/4

Recommendation concerning reduction of emissions of lead from combustion of leaded gasoline

- adopted 15 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### Recommendation 9/5

Recommendation concerning exploration and exploitation of the sea-bed and its subsoil

- adopted 15 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### Recommendation 9/6

Recommendation concerning restriction of discharges from the pulp and paper industry

- adopted 15 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### Recommendation 9/7

Recommendation concerning the guidelines for the Baltic Monitoring Programme
- adopted 17 February 1988, having regard to Article 13, Paragraph b)
of the Helsinki Convention

#### Recommendation 9/8

Recommendation concerning measures aimed at the reduction of discharges from industry

 adopted 17 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### Recommendation 9/9

Recommendation concerning measures aimed at the reduction of discharges from urban areas by the treatment of stormwater

- adopted 17 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

<sup>\*)</sup> Recommendations passed during 1988 are included in Baltic Sea Environment Proceedings No. 26

#### Recommendation 9/10

Recommendaton concerning antifouling paints containing organotin compounds

- adopted 17 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### Recommendation 9/11

Recommendation concerning guidelines for the establishment of national counter pollution measures regarding pleasure craft

- adopted 16 February 1988, having regard to Article 13, Paragraph b) of the Helsinki Convention

#### 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

#### 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

# BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

#### . HELSINKI COMMISSION .



HELCOM RECOMMENDATION 10/1

Adopted 14 February 1989, having regard to Article 13 Paragraph b) of the Helsinki Convention

#### ABNORMAL SITUATIONS IN THE MARINE ENVIRONMENT

#### THE COMMISSION,

NOTING with concern the extensive growth of algae in certain areas of the Baltic Sea Area, especially in the Belt Sea and the Kattegat in May and June 1988 which could be symptoms of ecological imbalance,

RECALLING Recommendation 6/14 concerning establishing of a pollution reporting system for pollution incidents,

RECALLING ALSO that the pollution reporting system, <u>inter</u> <u>alia</u>, contains procedures for early warning of pollution threats,

BEING CONVINCED that the procedures for early warning of pollution threats could also be utilized for early warning of abnormal environmental situations,

RECOGNIZING that nutrients (nitrogen and phosphorus) introduced into the sea contribute to the excessive fertilization and eutrophication of parts of the Baltic Sea Area,

RECOGNIZING ALSO the firm determination to aim at a substantive reduction of nutrients in the order of 50% as soon as possible but not later than 1995 in the "Declaration on the Protection of the Marine Environment of the Baltic Sea Area", adopted on 15 February 1988 in Helsinki by the Ministers responsible for the environmental protection in the Baltic Sea States,

NOTING the general improvements of the Baltic Monitoring Programme for the Third Stage to start in 1989, including fixed sampling depths for primary production measurements,

NOTING, HOWEVER, that sampling based on appropriate vertical and horizontal scanning methods of the water may be required to detect and monitor algal blooms,

DESIRING to protect the economic activities related to marine fish farming and tourism,

RECOMMENDS that the Contracting Parties to the Helsinki Convention should:

- a) utilize the early warning system established according to HELCOM Recommendation 6/14 also for early warning of abnormal environmental situations;
- b) use appropriate methods for detecting and monitoring algal blooms;
- c) consider a special study programme concerning risks to human bathers;
- d) intensify research to improve knowledge on algal blooms,

**RECOMMENDS FURTHER** that the Contracting Parties should report on their national action taken in accordance with this Recommendation to the meetings of the Committees.

## BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

• HELSINKI COMMISSION •



HELCOM RECOMMENDATION 10/2

Adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

ASSESSMENTS OF THE EFFECTS OF POLLUTION ON THE COASTAL  ${f AREAS}$  OF THE BALTIC SEA

THE COMMISSION,

RECALLING that according to Paragraph 2 of Article 4 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), each Contracting Party shall implement the provisions of the Convention within its territorial sea without prejudice to the sovereign rights with regard to these waters,

RECALLING ALSO that according to Paragraph 3 of Article 4 of the Helsinki Convention, the Contracting Parties undertake, without prejudice to their sovereign rights, to ensure that the purposes of the Convention will be obtained in their internal waters,

RECOGNIZING the importance of these coastal waters as recipients of discharges from land-based sources and as pathways of pollutants to the Baltic Sea Area,

RECALLING Paragraph e) of Article 13 of the Helsinki Convention, in which it is stated, inter alia, that the Commission shall, for the purpose to promote additional measures to protect the marine environment of the Baltic Sea Area, receive, process, summarize and disseminate from available sources relevant scientific, technological and statistical information,

RECALLING ALSO Paragraph 2 of Article 16 of the Helsinki Convention, in which the Contracting Parties, <u>inter alia</u>, undertake to promote studies, undertake, support or contribute to programmes aimed at developing ways and means for the assessment of the nature and extent of pollution, pathways, exposures, risks and remedies in the Baltic Sea Area,

NOTING the need for knowledge of the state of the coastal areas, presented by the Commission in the Guidelines for the Baltic Monitoring Programme (BMP),

EXPRESSING ITS CONCERN for the low frequency of the submission of national coastal assessments to the Commission,

**DESIRING** to achieve an appropriate assessment of the state of all coastal areas of the Baltic Sea and on changes in the environment, including those possibly due to the implementation of HELCOM Recommendations by the Contracting Parties to decrease harmful discharges to the marine environment,

**DESIRING ALSO** to increase the quality and quantity as well as frequency of the submissions of the contributions by the Contracting Parties to the assessment of the state of the coastal areas,

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

- a) compiled results of coastal monitoring should be reported in a generalized form every fifth year, in order to be available for the preparation of the periodic assessments of the state of the Baltic Sea;
- b) the first reports should be available as finalized for the use of the Commission in 1993;
- c) in order to facilitate the comparability of the reports their contents should preferably be arranged according to the proposal contained in the Annex to this Recommendation.

#### ANNEX to HELCOM Recommendation 10/2

#### Contents of the coastal assessments:

- 1. introductory remarks:
  - general description of the national monitoring programme for coastal waters,
  - general review of national monitoring activities carried out during the preceding five years,
  - introductory review of other available information,
- 2. information on results of monitoring in coastal waters and related studies
  - hydrographic and basic hydrochemical determinands
  - harmful substances in sea water and sediments
  - harmful substances in selected species
  - biological determinands,
- potential items for the periodic and/or specific assessments, and other related proposals,
- 4. conclusions.

## BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

. HELSINKI COMMISSION .



HELCOM RECOMMENDATION 10/3\*)

Adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

MONITORING OF RADIOACTIVE SUBSTANCES

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, and Paragraph 2 of Article 6, in which the Contracting Parties undertake to take all appropriate measures to control and strictly limit pollution by noxious substances and materials in accordance with Annex II of the Convention,

RECALLING ALSO Paragraph 3 of Article 16 of the Helsinki Convention, in which the Contracting Parties undertake directly, or when appropriate, through competent regional or other international organisations and other basis of the 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 concern for the effects of radioactive substances on the environment, due to accidental or other releases,

NOTING FURTHER the decision by the Commission that the monitoring of radioactive substances be started in 1985 as a continuation of the previous work coordinated by IAEA,

DESIRING to protect the Baltic Sea against harmful effects to be possibly caused by radioactive substances,

BEING MINDFUL of the need of reliable data on the radionuclides in the different compartments of the environment,

\_\_\_\_\_

<sup>\*)</sup> Supersedes the present HELCOM Recommendation 8/1

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

- a) each Baltic Sea State should have environmental stations on the sea or on the coast, and the Commission will be informed about the positions of the stations;
- b) the list contained in the Attachment to this Recommendation should be used as the basis for the environmental monitoring programme in all Baltic Sea States, bearing in mind that the list consists of minimum requirements, and that the voluntary measurements are also highly recommended as essential complementary information;
- c) guidelines for the monitoring programme prepared by experts and adopted by the Commission (Attachment to this Recommendation) should be followed as detailed as possible including the guidelines for reporting of data;
- d) the release data should be reported to the Commission according to the guidelines,

RECOMMENDS ALSO that the Baltic Sea States would report their data to the Commission once every year by 1 June.

#### ATTACHMENT TO HELCOM RECOMMENDATION 10/3

#### GUIDELINES FOR MONITORING OF RADIOACTIVE SUBSTANCES

#### 1. Environmental monitoring

- 1.1 with reference to sub-paragraph a) routine stations
- 1.2 with reference to sub-paragraph a) maps
- 1.3 with reference to sub-paragraph b) radionuclides to be monitored
- 1.4 with reference to sub-paragraph c) forms to be used for reporting environmental data

#### 2. Release data

- 2.1 with reference to sub-paragraph d) release data to be reported
- 2.2 with reference to sub-paragraph d) form to be used for reporting release data

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#### 1. Environmental monitoring

1.1 Routine station network for regular monitoring programme is recommended as indicated in the following list and the maps.

Additional stations are recommended to be sampled and data to be reported accordingly.

#### A. WATER SAMPLES

1. Belt Sea and Baltic Proper

```
DK = 4 st. *)
FI = 3 st.
DD = 10 to 20 st. (1 coastal st.)
DE = 5 to 20 st.
PL = 6 st. 3 (open sea st.) + 3 (coastal st.)
SU = 5 st.

The regions covered are:
Denmark = Belt Sea
Finland = North, Central, South
German Democratic Republic = Central, South-west
Federal Republic of Germany = South-west
Poland = South
Union of Soviet Socialist Republics = East
```

2. Great Belt and Sound

```
DK = 9 st.

DE = 2 st.
```

3. Kattegat and Skagerrak

```
DK = 5 st. (occasionally)
DE = about 8 st.
SE = 1 st.
```

4. Gulf of Finland

```
FI = 3 st. (1 open sea, 2 coastal st.)
DD = 2 st.
SU = 6 st.
```

5. Gulf of Bothnia

```
FI = 3 st. (2 open sea, 1 coastal st.)
SE = 1 st. (open/coastal)
```

<sup>\*)</sup> st. = station(s) location indicated in the maps attached(1.2)

#### B. SEDIMENT SAMPLES/ SINKING MATTER

#### 1. Baltic Prooer

```
FI = 2 st.
DD = 3 st. (coastal st.)
PL = 6 st. (3 open sea, 3 coastal st.)
SE = 1 open (1 coastal st.)
```

### SU = 2 st. (open sea)

#### 2. Belt Sea and Katteeat

```
DK = 3 st.
DE = 5 st. (maximum)
SE = 2 coastal st.
```

#### 3. Gulf of Finland

```
FI = 2 open sea st., 2 coastal st. (sinking matter) SU = 2 open sea st.
```

#### 4. Gulf of Bothnia

```
FI = 2 open sea st., 1 coastal st. (sinking matter)
SE = 1 coastal st.
```

#### C. FISH SAMPLES

#### 1. Baltic Proper

```
DD = commercial catches (1 open, 1 coastal)
DE = commercial catches [open sea areas] **)
PL = commercial catches (Gulf of Gdansk, open sea areas)
SE = 3 st. (1 open sea st., 2 coastal st.)
SU = 3 st. (coastal)
```

#### 2. Belt Sea and Kattegat

```
DK = commercial catches
SE = 1 st. (open)
```

#### 3. Gulf of Finland

```
FI = 2 \text{ st.}

SU = 3 \text{ st.} (coastal)
```

#### 4. Gulf of Bothnia

```
FI = 3 st.
SE = 2 st. (coastal)
```

### \*\*) [ ] = information uncertain

#### D. AQUATIC PLANTS (coastal stations)

1. Baltic Proper

DD = 2 st.

SE = 1 st. (open/coastal)

su = 4 st.

2. Belt Sea and Kattegat

DK = about 6 st.

SE = 3 st.

3. Gulf of Gdansk

PL = 3 st.

4. Gulf of Finland

FI = 1 st.

su = 3 st.

5. Gulf of Bothnia

FI = 1 st.

SE = 1 st.

#### E. BENTHIC ANIMALS

1. Baltic Proper

DD = 4 st.

PL = 2 st.

SE = 1 st.

2. Belt Sea and Kattegat

DK = 2 st.

SE = 3 st.

3. Gulf of Finland

FI = 1 st.

4. Gulf of Bothnia

FI = 1 st.

SE = 1 st.

- 1.2 Maps indicating location of the sampling areas:
  - Map 1. The sampling stations of Finland, German Democratic Republic, Sweden and USSR for sea water and the sites of the nuclear power stations.
  - Map 2. The sampling stations of Denmark, Federal Republic of Germany and Poland for sea water.
  - Map 3. The sampling stations for sediment/sinking matter.
  - Map 4. The sampling stations for aquatic plants and benthic animals.
  - Map 5. The sampling areas for fish.

### Abbreviations used for the names of the Contracting Parties:

DK = Denmark

FI = Finland

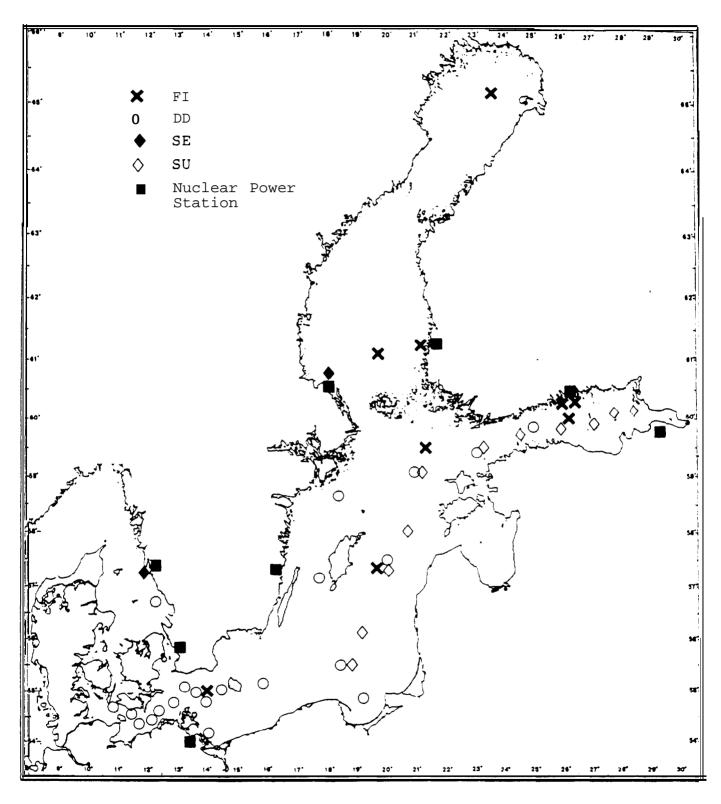
DD = German Democratic Republic

DE = Federal Republic of Germany

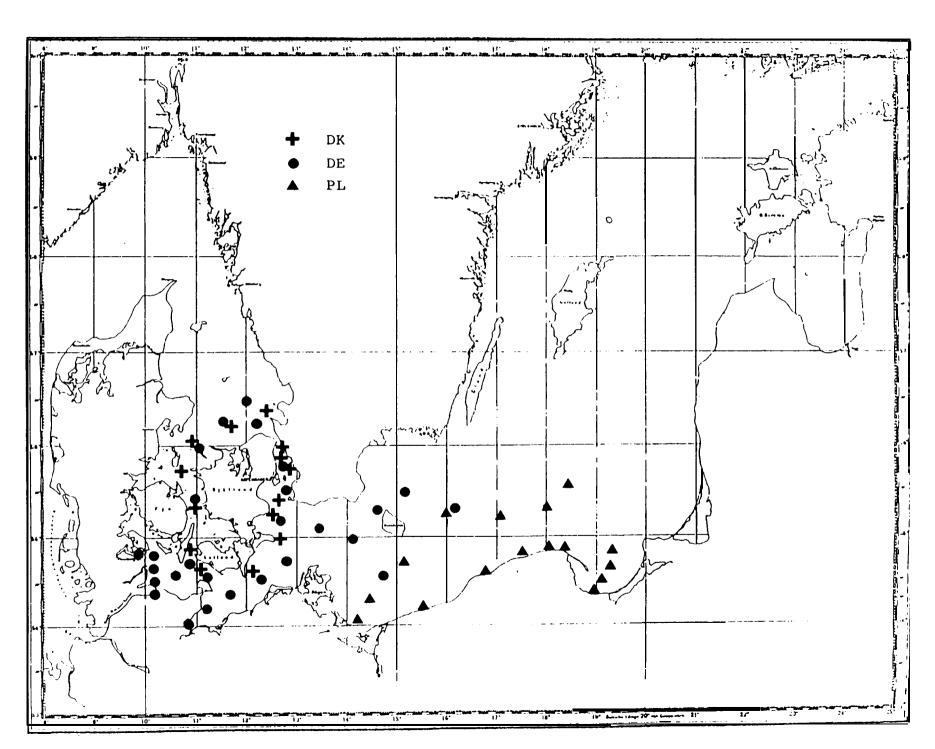
PL = Polish People's Republic

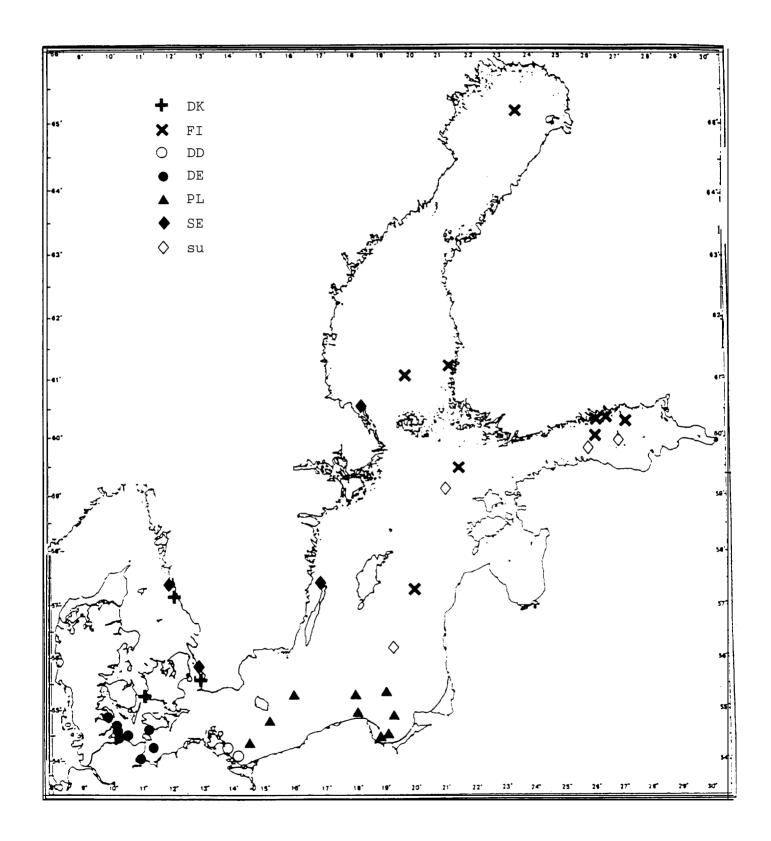
SE = Sweden

SU = Union of Soviet Socialist Republics

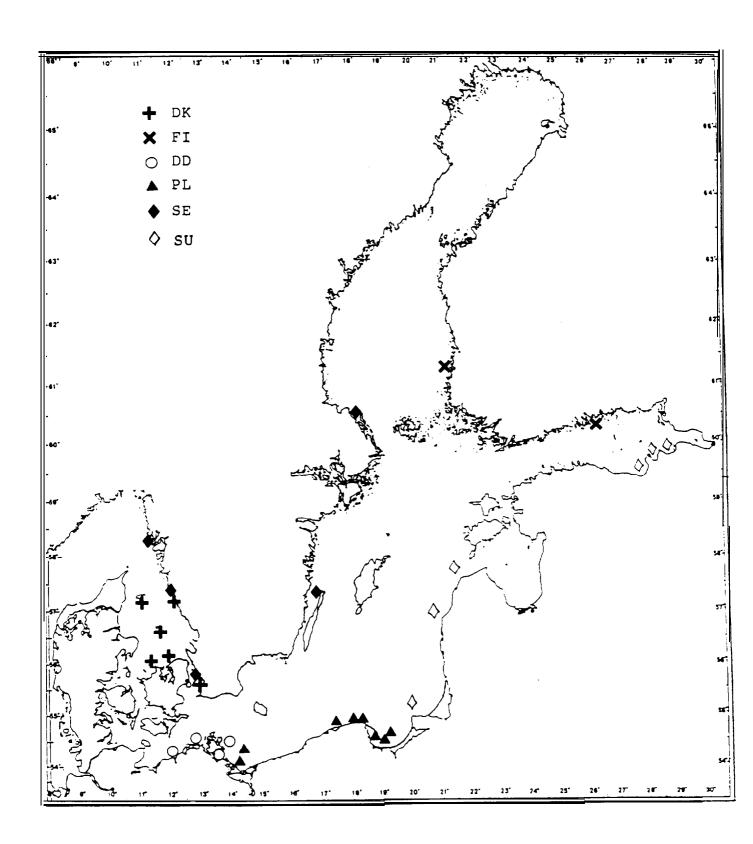


Map 1. The sampling stations of Finland, German Democratic Republic, Sweden and USSR for sea water and the sites of the nuclear power stations.

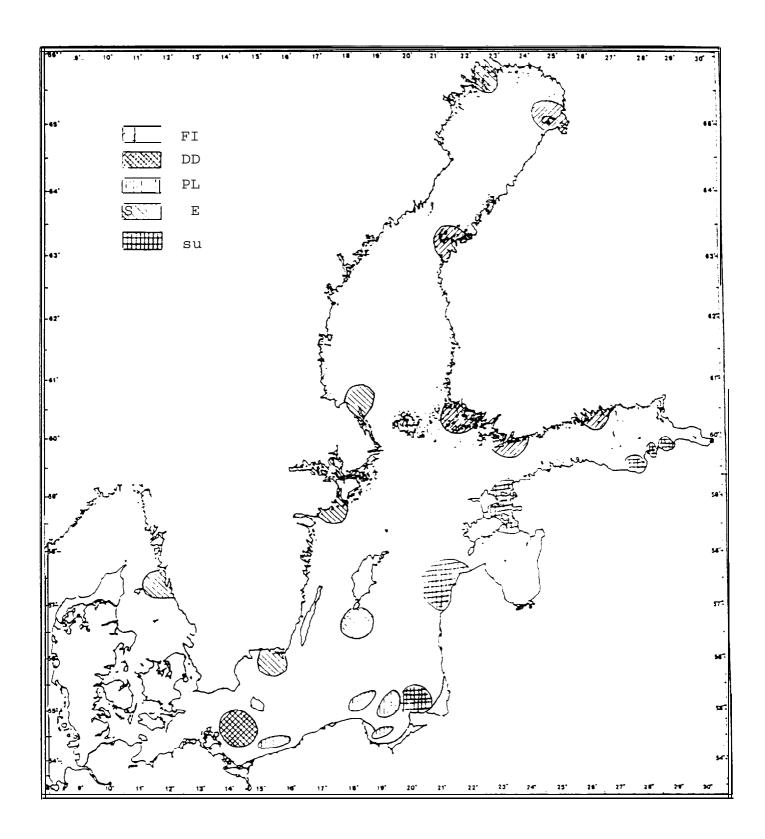




Map 3. The sampling stations for sediment  $\!\!\!/$  sinking matter.



Map 4. The sampling stations for aquatic plants and benthic animals.



Map 5. The sampling areas for fish.

		Sample	Obligatory	Voluntary	Desirable remarks
	Α.	Water (results in Bq m <sup>3</sup> )	Radiocesium *) Sr-90 ● )	H-3; Tc-99 Pu-239,240; Am-241; y-emitters	salinity, temperature, sample depth, total depth
	В.	Sediment (results in Bq kg dry wt. and Bq m 2)	y-emitters ***)	Sr-90; Pu-239,240; Am-241; natural radionuclides (e.g. Po-210)	type of sediment (mud, sand etc.), grain size distribution, water content, carbon content, oxic / anoxic, density, mass depth (kg m <sup>-2</sup> ), sample treatment and storage, sedimentation rate
<b>-</b> 39-	C.	Fish (results in Bq kg wet wt.)	f-emitters ● **)	<pre>Sr-90; natural radionuclides (e.g. PO-2101</pre>	<pre>species, total fish or organ (fraction), size, age, sex</pre>
	D.	Aquatic plants (results in Bq kg dry wt.)	y-emitters ***)	<pre>sr-90; Tc-99; Pu-239,240; Am-241; natural radionculides</pre>	species
	Ε.	Benthic animals (results in Bq kg dry wt.)	l-emitters ● **)	Sr-90; Tc-99; natural radionuclides (e.g. <b>Po-210);</b> Pu-239,240; Am-241	species, fraction
	F.	Sinking matter (results in Bq kg dry wt.)	cf. sediment	cf. sediment	dry weight (%), ignition loss (%)

<sup>\*)</sup> Cs-137 and Cs-134, if possible

<sup>\*\*)</sup> regularly, on a carefully selected number of samples

<sup>\*\*\*)</sup> K-40, Cs-137 and other d-emitters identified in the Y-spectrum

1.4 Forms to be used for reporting environmental data (4)

for **sea** water

for bottom sediment

for biota

for sinking matter

## HELCOM/MORS REPORTING FORMAT FOR SEA WATER

1.	Form identifier code	, W
2.	Country	lii
3.	Laboratory	1_1_1_1'
4 .	Sequence number	
5.	Sampling date	IIIII
6.	Sampling station  Lat.  Lon.	-   -   -   -   -   -     -   -   -
7.	Total depth (m)	! <u> </u>
a.	Sample depth (m)	
9.	Water salinity (°/ <sub>00</sub> )	
10.	Water temperature (°C)	
11.	Filtrated/not filtrated sample	l

Activity concentrations  $$\operatorname{Bq}\ \mathfrak{m}^{\text{-}3}$$ 

Radionuclide	Method	Value	Exp. term	Error %
	1 - 1 - 1	_ _ _	_ _ _	_ _
	_ _	1-1-1-1-1	1 - 1 - 1 - 1	_
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1_1_1
	_ _	_ _ _	1 - 1 - 1 - 1	1 - 1 - 1
	1 - 1 - 1	1-1-1-1-1	1 - 1 - 1 - 1	1
	1 - 1 - 1	_ _ _	1 - 1 - 1 - 1	1 - 1 - 1
	1 - 1 - 1	1_1_1_1_1	1 - 1 - 1 - 1	1 - 1 - 1
	1 - 1 - 1	_ _ _	_ _ _	1_1_k
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1 - 1 - 1
	1_1_1	_ _ _	_ _ _	1 - 1 - 1
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	
	1 - 1 - 1	_ _ _	1_1_1_1	1 - 1 - 1
	_ _	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	_ _
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	_ _
	_1	1_1_1_1_1	_ _ _	1_1_1
	111	_ _ _	1 - 1 - 1 - 1	1_1_1
	1 - 1 - 1	_ _ _	_	
	1 - 1 - 1	_ _ _ _	_ _ _	_ _
	1_1_1	1_1_1_1_1	_ _ _	<u> _ _ </u> -
	1 - 1 - 1	1_ _ _	_ _ _	11!
	1_1_1	_ _ _	1_1_1_1	_ _
	1 - 1 - 1	_ _ _	_ _ _	iI
	1 - 1 - 1	_ _ _ _	1 - 1 - 1 - 1	!_!_
_ _ _ _	1 - 1 - 1	_ _ _	_ _ _	1_1_1
_ _ _ _	1 - 1 - 1	_ _ _	1_1_1_1	_ _

# HELCOM/MORS REPORTING FORMAT FOR BOTTOM SEDIMENT

1.	Form identifier code	<u> </u>
2.	Country	!!
3.	Laboratory	
4.	Sequence number	
5.	Sampling date	IIIII
6.	Sampling station	1 - 1 - 1
	Lat.	。 
	Lon.	I-I_ _ _ _ _
7.	Sampling device/method	<u></u> 1 <b>I</b>
8.	Total depth (m)	lli
9.	Core slice depth from surface	
	upper (cm)	[
	lower (cm)	1 <u> </u>
10.	Sampled area (m²)	l <u>ll</u> l
11.	Type of sediment	l!
12.	Oxic/anoxic	!1
13.	Dry weight (%)	111
14.	Ignition loss (%)	11!

### Activity concentrations

Bq kg<sup>1</sup> dry wt. Bq m<sup>2</sup>

Radionuclide	Anal. method	Valu <b>e</b>	Exp. term	Error	Value	Exp. term
_ _ _ _ _	1 - 1 - 1	IIII	·  _ _ _	1-1-1	_ _ _	1_!_'_1
	_ _	1-1-1-1-1	1 - 1 - 1 - 1	1-1-1	1_ _ _	[_ _i_i_;
	- -	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1 - 1 - 1	1_1_1_1_1	1_1_1_1
	- -	1_1_1_1_1	1 - 1 - 1 - 1	1_1_1	_ _ _ _	[_ _!_!
	_ _	1-1-1-1-1	1 - 1 - 1 - 1	_ _	_ _ _	1_1_1_1
1-1-1-1-1-1-1-1-1	- -	_ _ _	_ _ _	1 - 1 - 1	_ _ _	1 - 1 - 1 - 1
	- -	1 - 1 - 1 - 1 - 1	1_1_1_1	1 - 1 - 1	_ _ _ _	_ _ _
	_ _	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1 - 1 - 1	_ _ _	1_1_1_1
_ _ _ _ _	- -	_ _ _ _	1 - 1 - 1 - 1	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _ _
_ _ _ _ _	- -	1-1-1-1-1	_ _ _	1 - 1 - 1	1-1-1-1-1	1_1_1_1
_ _ _ _ _	- -	1-1-1-1-1	_ _	1 - 1 - 1	1-1-1-1-1	1_1_1_1
_ _ _ _	- -	1-1-1-1-1	_ _ _	1 - 1 - 1	1-1-1-1-1	1_1_1_1
	- -	1-1-1-1-1	1 - 1 - 1 - 1	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1-1-1-1
	- -	_ _ _	_ _ _	1 - 1 - 1	_ _ _	_ _ _
	- -	1_1_1_1_1	1 - 1 - 1 - 1	_ _	1 - 1 - 1 - 1 - 1	1_!_''
	- -	1-1-1-1-1	_ _ _	1-1-1	1 - 1 - 1 - 1 - 1	_ _ _
1-1-1-1-1-1-1-1-1	1_1_1	_ _ _	1-1-1-1	1 - 1 - 1	1-1-1-1-1	_
	- -	_ _ _	1-1-1-1	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1_1_1_1_!
1-1-1-1-1-1-1-1-1	- -	_ _ _	1 - 1 - 1 - 1	1-1-1	1-1-1-1-1	1_1_!_!
1-1-1-1-1-1-1-1-1	- -	_ _ _	1-1-1-1	1_1_1	1-1-1-1-1	_ _ _
	- -	1-1-1-1-1	1 - 1 - 1 - 1	1-1-1	_ _ _	1_1_1_:
	i - I - I	_ _ _	_ _ _	- -	1-1-1-1-1	Iii
	_ _	_ _ _	1-1-1-1	1-1-1	_ _ _	1_!_!_!
_ _ _ _	1 - 1 - 1	1-1-1-1-1	1-1-1-1	- -	_ _ _	<u>                                     </u>
	1 - 1 - 1	1-1-1-1-1	_ _ _	1_1_1	1_1_1_1_1	1_1_!_:
_ _ _ _	1 - 1 - 1	_ _ _	_ _ _	1 - 1 - 1	1-1-1-1-1	1_!_!_;

## HELCOM/MORS REPORTING FORMAT FOR BIOTA

1.	Form identifier code	В
2 .	Country	
3 .	Laboratory	lii
4 .	Sequence number	
5 .	Sampling date	l <u>llll</u> i
6.	Sampling area/station  Lat.  Lon.	
7.	Sample depth (m)	1 - 1_1,
a .	Species code (Rubin)	1-1-1-1_1_1_1_1_
9 .	Tissue code	11
10.	Number of specimen In the sample	l <u>l</u>
11.	Average size of specimen  Length (cm)  Weight (g)	 
12.	Dry weight (%)	1 <u></u> , <u></u> .
13.	Ignition loss (%)	1:

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Activity concentrations (given for fish in Bq  $kg^{-1}$  wet wt., for aquatic plants and benthic animals in Bq  $kg^{-1}$  dry wt.)

Radionuclide	Method	Value	Exp. term	Basis	Error
_ _ _ _	1_1_1	_ _ _	1_1_1_1	1_1	1_1_!
	1 - 1 - 1	_ _ _ _	_ _ _	1 - 1	_ _
_ _ _ _	_ _	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1 - 1	_ _
1_1_1_1_1_1_1_1	1 - 1 - 1	1_1_1_1_1	1_ _ _	1 - 1	_ _
1_1_1_1_1_1_1_1_1	1_1_1	1 - 1 - 1 - 1 - 1	_ _ _	1 - 1	_ _
	_ _	_ _ _	1_1_1_1	1 - 1	1_1_1
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1 - 1	1_1_1
	1 - 1 - 1	_ _ _	_ _ _	1_1	1-1-1
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _ _	1 - 1	1 - 1 - 1
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _ _	1 - 1	1-1-1
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _ _	1 - 1	_
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _	1_1	1_1_1
	1 - 1 - 1	_ _ _	1 - 1 - 1 - 1	1 - 1	_ _
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _ _	1_1	1 - 1 - 1
1_1_1_1_1_1_1_1_1	1 - 1 - 1	_ _ _	1 - 1 - 1 - 1	11	111
	1 - 1 - 1		_ _ _	1 - 1	_ _
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1 - 1 - 1 - 1	1 - 1	_ _
	1 - 1 - 1	1_1_1_1_1	_ _ _	11	1 - 1 - '
	1 - 1 - 1	1_1_1_1_1	1 - 1 - 1 - 1	1 - 1	_ _
	1 - 1 - 1	_ _ _	_ _ _	1_1	1_1_1
	1 - 1 - 1	1_1_1_1_1	1_1_1_1	1 - 1	1 - 1 - 1
	1 - 1 - 1	_ _ _	_ _ _	1 - 1	_ _
_ _ _ _ _	1_1_1	_ _ _	_ _ _	1 - 1	I_I_!
	1 - 1 - 1	_ _ _ _	_ _ _	1 - 1	1 - 1 - 1
	1 - 1 - 1	_ _ _	_ _ _	1 - 1	1_1_1

# HELCOM/MORS REPORTING FORMAT FOR SINKING MATTER

1.	Form identifier code	, <u>M</u>
2.	Country	l <u></u> ll
3.	Laboratory	lll
4.	Sequence number	l <u></u> ll
5.	Sampling period	
	from	· · · · · · · · · · · · · · · · · · ·
	to	
6.	Sampling station	1 - 1 - 1 - 1 _ 1 _ 1 _ 1
	Lat.	。 .   _ _
	Lon.	。 . 
7.	Sampling device/method	ll_
a .	Total depth (m)	1_!_!
9 .	Sample depth (m)	lli
0.	Dry weight (%)	1 - 1 -
L1.	Ignition loss (%)	1 1

Radionuclide	Anal. method	Value	Exp. term	Error %
	1_1_1	_ _ _	1_1_1_1	1_1_1
	I_ I _I	_ _ _	_ _ _	_ _
_ _ _ _	_	_ _ _ _	1_1_1_1	1 - 1 - 1
	1_1_1	1_1_1_1_1	1 - 1 - 1 - 1	_ _
	1_1_1	_ _ _	1 - 1 - 1 - 1	1 - 1 - 1
	_ _	_ _ _	1 - 1 - 1 - 1	1 - 1 - 1
	1_1_1	_ _ _	_ _ _	1 - 1 - 1
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	1_1_1_1	_ _
	1 - 1 - 1	1 - 1 - 1 - 1 - 1	_ _ _	_ _
	1 - 1 - 1	_ _ _	_ _ _	1-1-1
	_ _	1111	_ _ _	1 - 1 - 1
	1 - 1 - 1	1_1_1_1_1	- - -	1 -   -
	1_1_1	1_1_1_1_1	_ _ _	1 - 1 - 1
	1 - 1 - 1	_ _ _	1_1_1_1	1 - 1 - 1
	1 - 1 - 1	_ _ _ _	1 - 1 - 1 - 1	1 - 1 - 1
	_ _	_ _ _	_ _ _	1 - 1 - 1
	_ _	_ _ _ _	- - -	_ _
_ _ _ _	_ _	1_1_1_1_1	_ _ _	_ _
	1_1_1	_ _ _ _	_ _ _	_ _
	1_1_1	_ _ _	_ _ _	_ _
	1_1_1	_ _ _ _	_ _ _	_
	1 - 1 - 1	_ _ _ _	_ _ _	1_ _
	1_1_1	1_1_1_1_1	_ _ _	1 - 1 - 1
	1 - 1 - 1	_ _ _	_ _ _	1 - 1 - 1
	1_1_1	_ _ _	_ _ _	1_1_1

Guidelines for filling the HELCOM/MORS Reporting formats

The forms for sea water, bottom sediment, biota and sinking matt should be filled in according to the following description.

### Item <u>Code Description</u>

Form identifier code w = sea water

S = bottom sediment

B = biota

M = sinking matter

Country Denmark = 26

Federal Republic of Germany = 06

Finland = 34

German Democratic Republic = 96

Polish Peoples Republic = 67

Sweden = 77

Union of Soviet Socialist

Republics = 90

Laboratory Insert a four-letter mnemonic code for

your laboratory:

RISO = Risø National Laboratory (DK)

DHIG = Deutsches Hydrographisches

Institut (DE)

STUK = Finnish Centre for Radiation and

Nuclear Safety (FI)

SAAS = Staatliches Amt für Atomsicherheit

und Strahlenschutz (DD)

CLOR = Central Laboratory for Radiological

Protection (PL)

NCRS = National Swedish Environmental

ProtectionBoard, CoastalResearch

Laboratory (SE)

Sequence number

Insert the number of your W, s, B and M format being filled |8|8|0|0|1 for the first form in 1988 (the two first digits are for the year).

Sampling date

Indicate the year (last **two** digits only), month and date of the sampling, e.g. |8|8|1|2|3|1|

Sampling station

Insert first the code of the sampling station (without spaces), e.g.

and then the coordinates as follows:  $60"\ 15,5' = |6|0|1|5|5|7|0|$  Note that decimal fractions of minutes are recorded and not seconds. N (north) and E (east) are not needed in the Baltic Sea.

Total depth and sample depth (m) (W7-8, S8, B8, M8-9)

Insert the depth in metres, e.g.

0.1 m = |0|0|01.20 m |0|0|1240 m = |2|4|0

Water salinity (°/<sub>00</sub>)
(W9)

 $6.85 ^{\circ}/_{\circ\circ} = | 0 | 6 | 8 | 5 |$ 

Water temperature (°C) (W10)

Water temperature (°C) 5 .  $\frac{1}{2} \frac{|0| \cdot 5|1|}{|1|}$ 

Filtrated/not filtrated
sample
(W11)

Insert F if filtrated or N if not filtrated ted

( .. - - ,

Sampling device/method
(S7, M7)

Make a list of the methods used in your laboratory and insert your own numeric: code into the form according to the list. Keep up a corresponding catalog on the descriptions of methods. Example: | O:1; Sediment sampling with the Niemistö corer used by STUK since 1977. Reference: Niemistö, L., A gravity corer for studies of soft sediments. Merentutkimuslait. Julk./Havsforskningsinst. Skr. 238, 33-38, Helsinki, 1974.

|0|2| Sediment sampling with box corer used by STUK...

The HELCOM data bank should have an up-to-date catalog on all the methods used in your laboratory.

Core slice depth from surface (S9)

Insert the upper and lower limit of the slice depth in centimetres, e.g.

$$0-2 \text{ cm} = \text{upper} \left| \begin{array}{c} 0 \\ \end{array} \right|$$

lower | 0 | 2 |

 $2-4 \text{ cm} = \text{upper} \mid \underline{0} \mid \underline{2} \mid$ 

lower | 0 | 4

Sampled area  $(m^2)$  (S10)

Indicate, which area of bottom surface the sample represents, e.g. 5 subsamples with the Niemisto corer ( $\emptyset$  5 cm) =  $5 \times 19.6 \text{ cm}^2 = 98.2 \text{ cm}^2 = 10 + 0 + 1 \text{ 3 m}^2$ 

Type of sediment (S11)

Main codes:

0 = gravel

1 = sand

2 = fine sand

3 = silt

4 = clay

5 = mud ("gyttja")

The numbers O-5 have the same meaning both as first and second digit, but the first is always the dominating component

in the sample, e.g.

|3|0| = silt and gravel,

|3|4| = silt and clay.

Pure gravel = |0|0

pure sand = |1|1|

pure f. sand = |2|2|

pure silt = | 3 | 3 |

pure = | 4 | 4 y |

pure mud = |5|5|

### Additional codes:

6 = glacial clay characteristic for the
Baltic Sea.

Number 7 as second digit means "soft", e.g.

 $|\underline{4}|\underline{7}| = \text{soft clay}$ 

Number 8 as second digit means "sulphidic", e.g.

 $|\underline{4}|\underline{8}|$  = sulphidic clay

Number 9 **as** second digit means, that the sample consist ferromanganese concretions.

Mass depth (kg  $\mathfrak{m}^{-2}$ ) (S11)

Deleted during editorial work after STC 15.

Oxic/anoxic (S12)

Insert 0 if the surface layer of the sediment is **oxic** or A if anoxic.

Dry weight (%) (S13, B12, M10)

Dry weight in percents from fresh weight

Ignition loss (%) (S14, B13, M11)

Ignition **loss** in percents from dry weight

Species code (Rubin) (B8)

The RUBIN 8-letter codes are strongly preferred. Codes for some common species are as follows:

FUCU VES = Fucus vesiculosus

CLAD GLO = Cladophora glomerata

MACO BAL = Macoma baltica

MYTI EDU = Mytilus edulis

SADU ENT = Saduria entomon

(syn. Mesidotea e.)

CLUP HAR = Clupea harengus

GADU MOR = Gadus morhua

Tissue code (B9)

Insert a code for the tissue or fraction analysed as follows:

FISH AND MAMMALS

01 fish as whole

02 as whole, without entrails

03 as whole, without head and entrails

04 flesh with bones

05 flesh without bones (fillets)

06 head

07 fins

08 skin/epidermis

09 scales

10 bones

11 gills

12 entrails

13 stomach

14 intestine

15 stomach + intestine

16 heart

17 blood

18 liver

19 kidney

20 ovary

21 testes

### **INVERTEBRATES**

- 41 whole animals
- 42 shells
- 43 soft parts

### PLANTS

- 51 whole haptophytic plants
- 52 loose lying plants
- 53 growing tips
- 54 upper parts of plants
- 55 lower parts of plants

Radionuclide

First the symbol of element and then the mass number (without spaces), e.g.

K40

SR90 [

<u>cs137</u>

| AG110M |

PU239240

CM243244

Anal. method

Insert your own code for analyse method,
cf. sampling device/method

Value + exp. term

Insert the result in exponential form, first the mantissa and then the signed exponential term as follows:

 $22\ 000 = |2|2|1| + |0|4|$ 

1.54 = |1|5|4| |+|0|0|

0.003 = |3| - |---| 0 |3|

0.076 = |7|6| - |0|2|

(The results of sediment analyses are recommended to give both in Bq kg-1 dry wt. and in Bq  $m^{-2}$ )

Error

Insert the analytical error in percents (1 sigma).

Basis

Insert a one - letter code for the basis on which the value is being reported, (B) as follows:

W = wet weight (fresh weight)

D = dry weight

A = ash weight (not recommended)

### 2. Release data

### 2.1 Release data to be reported:

- 1) Discharges into the aquatic environment from the nuclear power plants
  - on obligatory basis
- 2) Discharges into air from the nuclear power plants and other releases, if significant
  - on voluntary basis
- Only nuclides with a longer half-life than one week should be reported
- 4) Other necessary monitoring is encouraged to be carried out e.g. related to airborne pollution, river discharges etc.

2.2 Form to be used in reporting release data

### REPORTING FORMAT

Radioactive <b>Discharges</b>	to	the	Baltic Sea	from	Land	Based	Sources
-------------------------------	----	-----	------------	------	------	-------	---------

NAME	<u>'Y</u>					
COUNTR					-	
YPE OF	FACILITY (e.		ctor, fue		operation	ıs,
OCATIO	1 - REGION _					
EAR O	ERATION COMM	ENCED _				
	ERATION COMM		ased sour	ces)		
RIVER		nland ba				S
RIVER JEAREST	in <b>case</b> of ir	nland ba	EFFLUENT			S
RIVER JEAREST	in <b>case</b> of ir	nland ba	EFFLUENT			S

RADIOACTIVE D		YEAR	
TOTAL ANNUAL	DISCHARGE OF	RADIONUCLIDES IN	LIQUID EFFLUEN
		than one week):	_
Nuclide	Bq	Nuclide	Bq
		_	
		<del>-</del>	
		_	
		_	
		_	
	-	_	
		_	
AIRBORNE DISC	HARGES FROM SI	TE (on valuntary ba	ısis):
Nuclide	Bq	Nuclide	Bq
1.0.0110.0		1.0.0110.0	
		_	
		_	
		_	
		_	
	-		
		_	
ESTIMATE OF FF	RACTION OF ABO	VE MENTIONED RADIO	NUCLIDES REACHI
THE BALTIC SE	A		
ADDITIONAL IN	FORMATION		

### BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

HELSINKI COMMISSION .



HELCOM RECOMMENDATION 10/4

Adopted 14 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

POLLUTION LOAD COMPILATION

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 minimise land-based pollution of the marine environment of the Baltic Sea Area.

NOTING the increasing concern on harmful effects of pollutants in the environment and that an essential amount of various contaminants is transported to the Baltic Sea via rivers, industrial and municipal point sources,

DESIRING to limit the pollution of the Baltic Sea due to the land-based sources of pollutants,

BEING MINDFUL of the need of reliable data on the amounts of pollutants carried from land-based sources to the Baltic Sea,

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

- a) the monitoring of the pollution load should be performed from 1 January 1990 to 31 December 1990 in accordance with the Guidelines for the Second Pollution Load Compilation accepted by STC 15;
- b) data on pollution load collected in the year 1990 should be submitted by all the Contracting Parties to the Secretariat in accordance with the form attached to the Guidelines as early as possible but not later than 1 October 1991,

RECOMMENDS ALSO that the Baltic Sea States would report on measures taken for the implementation of the Recommendation to the Lead Countries and for the consideration of STC 16 by 1 September 1989.

### BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

. HELSINKI COMMISSION .



HELCOM RECOMMENDATION 10/5\*)

Adopted 15 February 1989 having regard to Article 13, Paragraph b) of the Helsinki Convention

GUIDELINES FOR THE ESTABLISHMENT OF ADEQUATE RECEPTION FACILITIES IN PORTS

THE COMMISSION,

RECALLING that the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) has adopted guidelines on the provision of adequate reception facilities in ports for oily wastes, residues and mixtures containing noxious liquid substances, sewage, and garbage to assist Governments in implementing the requirements of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78),

RECALLING ALSO that all Contracting Parties to the Helsinki Convention are also parties to MARPOL 73/78,

**RECOGNIZING** that the Governments of the Contracting Parties to the Helsinki Convention apply the relevant parts of the Guidelines in implementing the requirements of MARPOL 73/78 and of the Helsinki Convention relating to the reception of oily wastes, residues and mixtures containing noxious liquid substances, sewage, and garbage,

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

- a) further study problems related to the provision of adequate reception facilities, especially those problems which are particular for the Baltic Sea Area and;
- b) circulate the results of the studies to the other Contracting Parties of the Helsinki Convention,

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<sup>\*)</sup> This Recommendation supersedes HELCOM Recommendations 1/11, 6/8 and 7/10

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

- c) require those responsible for reception facilties where noxious liquid substances are unloaded to receive the tank washings resulting from the application of pre-wash procedures;
- d) ensure that no tankers are loaded at places where no adequate arrangements have been made for the reception of ballasts or of tank washings containing cargo residues for noxious liquid substances which might have been removed from the ship in order to enable loading to be carried out;
- e) ensure that no tankers are repaired at places where no adequate arrangements have been made for the reception of ballast water or tank washings containing cargo residues of noxious liquid substances which has to be removed from the ship in order to enable repair work to be carried out;
- f) promote the use of shore reception facilities for residues and wastes from ships by making such facilities and services available at reasonable cost or without charging special fees to the individual ships.

### BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

· HELSINKI COMMISSION .



### HELCOM RECOMMENDATION 10/6 \*)

Adopted 15 February 1989 having regard to Article 13, Paragraph b) of the Helsinki Convention

APPLICATION BY THE BALTIC SEA STATES OF A HELSINKI CONVENTION FORM FOR REPORTING ALLEGED INADEQUACY OF RECEPTION FACILITIES FOR SEWAGE

THE COMMISSION,

**RECALLING** that the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) has adopted forms for reporting

- alleged inadequacy of oily waste reception facilities;
- difficulties encountered in the disposing of residues/water mixtures containing noxious liquid substances (NLS) from ships; and
- alleged inadequacy of reception facilities for garbage,

**RECALLING ALSO** that all Contracting Parties to the Helsinki Convention are also parties to MARPOL 73/78,

**RECOGNIZING** that the Governments of the Contracting Parties to the Helsinki Convention have instructed ships flying their flag to report in accordance with the IMO forms,

**RECALLING** 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, concerning sewage,

**RECOGNIZING** that an agreed IMO form for reporting on inadequacy of reception facilities for sewage is not available,

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

a) instruct ships flying their flag to report in accordance with the form given in the attachment to this Recommendation any inadequacy of reception facilities for sewage in ports of the Baltic Sea Area experienced when applying the provisions of Regulation 7 of Annex IV of the Helsinki Convention; and

<sup>\*)</sup> This Recommendation supersedes HELCOM Recommendations 6/11 and 7/9

b) see to it that the master of the ship concerned should complete and submit to the administration the form contained in the attachement to this Recommendation in each instance when he has experienced difficulties in disposing of sewage to reception facility,

**RECOMMENDS FURTHER** that the Governments of the Contracting Parties to the Helsinki Convention should in addition to the IMO procedures for reporting:

- c) evaluate each report received and where the allegation is considered justified inform the Contracting Parties in question and submit to the Secretariat of the Helsinki Commission a summary report;
- d) submit, when receiving such information from a Contracting Party, comments or other information on the alleged inadequacy, to the Contracting Party which has submitted the report and to the Secretariat of the Helsinki Commission,

**REQUESTS** the Secretariat of the Helsinki Commission to circulate information received under sub-paragraphs c) and d) above.

### $\begin{array}{ll} {\tt HELCOM} & {\tt Recommendation} & 10/6 \\ {\tt Attachment} & \\ \end{array}$

### BALTIC SEA AREA FORM FOR REPORTING ALLEGED INADEQUACY OF RECEPTION FACILITIES FOR SEWAGE

The Master of a ship having difficulties discharging sewage to reception facilities should forward the information below, together with supporting documentation, to the competent authority of the Flag State.

1.	Country:		
	Name of Port or Are	a:	
	Location in the po	rt (e.g.	<pre>berth/terminal/jetty):</pre>
	Date of Call:		

- 2. Amount of sewage for discharge to facility:
  \_\_\_\_\_\_ m<sup>3</sup>
  - Amount of sewage not accepted by facility: above/other  $\ensuremath{\text{m}^3}$
- 3. Special problems encountered:

Undue delay Inconvenient locality of facilities Use of facility not technically possible Other

- 4. Remarks: (e.g. information received from port authorities or operators of reception facilities: reasons given concerning 2 above)
- 5. Ship's particulars

Name of ship: Distinctive number or letters: Port of registry: Owner or operator: Number of persons on board:

		·				
Date of	completion	of f	form	Signature	of	Master

### BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

. HELSINKI COMMISSION .



HELCOM RECOMMENDATION 10/7

Adopted 15 February 1989 having regard to Article 13, Paragraph b) of the Helsinki Convention

GENERAL REQUIREMENTS FOR RECEPTION OF WASTES

THE COMMISSION,

RECALLING HELCOM Recommendation 1/1 concerning Measures to Ensure the Use of Reception Facilities for Wastes from Ships,

RECALLING also HELCOM Recommendation 10/5 concerning Guidelines for the Establishment of Adequate Reception Facilities in Ports,

BEING **CONVINCED** that the establishement of *common* general requirements for reception of wastes in the Baltic Sea Area will be of great use to ships and ports,

RECOMMENDS the Governments of the Contracting Parties to the Helsinki Convention to take into account the general requirements for reception of wastes given in the Attachment to this Recommendation when applying the provisions of the Helsinki Convention relating to shore reception facilities.

### HELCOM Recommendation 10/7 Attachment

#### GENERAL REQUIREMENTS FOR RECEPTION OF WASTES

#### 1. OILY WASTES

### a) Ballast water and tank washings

#### - Port requirements:

A sufficient reception capacity as referred to in the IMO Guidelines should be supplied under normal traffic conditions.

### - Ship requirements:

Ships should give at least 24 hour's notice for using reception facilities.

### b) Oily bilge water and sludge

### - Port requirements:

A sufficient reception capacity as referred to in the IMO Guidelines should be provided.

### - Ship requirements:

Ships of 999 GRT and below should be able to pump the residues with a minimum capacity of  $2.5~\text{m}^3$  /h and ships of 1000 GRT and above with a minimum capacity of  $5.0~\text{m}^3$  /h.

Ships should give at least 24 hour's notice for using reception facilities. If the oily bilge water and sludge to be discharged contain cleaning agents then such information should be included in the notification to the port.

#### 2. NOXIOUS LIQUID SUBSTANCES CARRIED IN BULK

### - Port requirements:

Adequate reception arrangements as referred to in the IMO Guidelines should be provided.

### - Ship requirements:

Ships should give at least 24 hour's notice for using reception facilities.

### 3. SEWAGE

### - Port requirements:

Connection to local sewage system or sufficient capacity of mobile units should be provided.

#### - Ship requirements:

Ships should be able to pump out the residues in one hour or less. Ships should give at least 24 hour's notice for using reception facilities.

#### 4. GARBAGE

Containers and/or garbage bags should be provided on the quay or lifted on board the ship for domestic and other non-hazardous operational waste. Non-hazardous cargo residues, dunnage, linings, etc. should be taken care of separately in accordance with port requirements.

#### 5. RESIDUES CONTAINING OTHER HARMFUL SUBSTANCES

Special arrangements should be made in accordance with port requirements.

### **BALTIC MARINE ENVIRONMENT** PROTECTION COMMISSION

• HELSINKI COMMISSION •



HELCOM RECOMMENDATION 10/8\*)

Adopted 15 February 1989, having regard to Article 13, Paragraph b) of the Helsinki Convention

CO-OPERATION IN INVESTIGATING VIOLATIONS OR SUSPECTED VIOLATIONS OF DISCHARGE AND RELATED REGULATIONS FOR SHIPS AND DUMPING REGULATIONS

THE COMMISSION,

RECALLING HELCOM Recommendation 6/13 concerning Co-operation in Investigating Violations or Suspected Violations of Discharge and Related Regulations for Ships and Dumping Regulations,

RECALLING ALSO HELCOM Recommendation 8/4 concerning Amendments to Regulations 1-5 of Annex IV and Appendices I-IV to Annex IV of the Helsinki Convention, as well as HELCOM Recommendation 8/5 concerning Amendments to Regulation 5 of Annex VI and the Appendix to Annex VI of the Helsinki Convention,

RECALLING FURTHER HELCOM Recommendation 10/9 concerning Amendment to Regulation 8 of Annex IV of the Helsinki Convention,

BEARING IN MIND that the Commission has recommended that the Governments of the Contracting Parties to the Helsinki Convention should apply the Guidelines attached to HELCOM Recommendation 6/13 when co-operating in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations,

RECOGNIZING that the above mentioned amendments to Annex IV of the Helsinki Convention and its Appendices and amendments to Annex VI of the Helsinki Convention and its Appendix have necessitated a revision of the Guidelines,

RECOGNIZING ALSO that all Contracting Parties to the Helsinki Convention are also parties to MARPOL 73/78,

RECOGNIZING FURTHER that the entry into force of Annexes II and V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) has also necessitated a revision of the Guidelines,

<sup>\*)</sup> This Recommendation supplements HELCOM Recommendation 6/13

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention should apply the attached Guidelines adopted by the tenth meeting of the Helsinki Commission when co-operating in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations in lieu of the Guidelines attached to HELCOM Recommendation 6/13.

## HELCOM Recommendation 10/8 Attachment

GUIDELINES FOR CO-OPERATION IN INVESTIGATING VIOLATIONS OR SUSPECTED VIOLATIONS OF DISCHARGE AND RELATED REGULATIONS FOR SHIPS AND DUMPING REGULATIONS

#### INTRODUCTION

According to Regulation 2 of Annex IV of the Helsinki Convention the Contracting Parties shall, without prejudice to Paragraph 4 of Article 4 of the Convention, as appropriate, assist each other in investigating violations of the existing legislation on anti-pollution measures, which have occured or are suspected to have occured within the Baltic Sea Area. This assistance may include, but is not limited to inspection by the competent authorities of oil record books, cargo record books, logbooks and engine logbooks, and taking oil samples for analytical identification purposes.

The assistance envisaged in Regulation 2 of Annex IV relates to violations of the provisions of this Annex (oil, noxious liquid substances in bulk, harmful substances in packaged forms, sewage and garbage). Furthermore, Paragraph 6 of Article 9 of the Helsinki Convention states that in case of dumping suspected to be in contravention of the provisions of Article 6 the Contracting Parties shall co-operate in investigating the matter in accordance with Regulation 2 of Annex IV of the Convention.

The guidelines, as described in the following paragraphs, are applicable only to ships flying the flags of the Baltic Sea Countries. However, in the case of violations of the dumping provisions which have occured or are suspected to have occured within the Baltic Sea Area, the guidelines are also applicable to ships not flying the flags of the countries parties to the Helsinki Convention:

- a) loading, within the territories or territorial seas of the Contracting Parties, matter which is to be dumped, or
- b) believed to be engaged in dumping within the territorial seas of the Contracting Parties.

The guidelines are also applicable to ships not flying the flags of the Contracting Parties to the Helsinki Convention violating or believed to have violated the discharge provisions of Annexes I, II and V to MARPOL 73/78 within the Baltic Sea Area. In case of investigations of the alleged violation of MARPOL provisions which took place at the high sea, the guidelines are applicable only to ships flying the flags of the countries parties to MARPOL 73/78.

#### **GENERAL**

For the purposes of these guidelines, "discharge" in relation to harmful substances or effluents containing such substances (Regulation 3.3 a) and b) of Annex IV of the Helsinki Convention), means any release howsoever caused from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying. Discharge does not include dumping, or release of harmful substances directly arising from the exploration, exploitation and associated off-shore processing of sea-bed mineral resources, or release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.

"Dumping" means any deliberate disposal at sea of waste or other matter from vessels, aircraft, platforms or other man-made structures at sea or any deliberate disposal at sea of vessels, aircraft, platforms or other man-made structures at sea. Dumping does not include the disposal at sea of waste or other matter incidental to or derived from normal operation of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or other structures. Nor does dumping include placement of matter for the purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of the Helsinki Convention.

When a Contracting Party receives areport that a discharge or dumping other than permitted under the Helsinki Convention or a discharge other than permitted under Annexes I, II and V to MARPOL 73/78, have occured or are suspected to have occured within tha Baltic Sea Area, that Contracting Party should take the necessary steps to investigate the matter.

Such reports can be received from several sources and these include:

reports on incidents involving harmful substances and on significant spillages of oil or other harmful substances submitted according to Paragraph 1 of Regulation 5 of Annex VI of the Helsinki Convention;

reports from masters of ships and pilots of aircraft according to Paragraph 2 of Regulation 5 of Annex VI of the Helsinki Convention;

reports resulting from surveillance activities according to Regulation 3 of Annex VI of the Helsinki Convention;

reports from other sources.

Reports on discharges or dumpings other than permitted under the Helsinki Convention or MARPOL 73/78, Annexes I, II and V which have occured or are suspected to have occured within the Baltic Sea Area, submitted according to Regulation 5 of Annex VI of the Helsinki Convention, should be drawn up and transmitted according to the guidelines adopted by the Helsinki Commission.

#### SCHEME OF CO-OPERATION

Situations may arise during a Contracting Party's investigation of an incident reported in accordance with the preceding Chapter, when necessary information/evidence cannot be obtained by the Contracting Party itself.

In such cases the investigating Contracting Party can request other Contracting Parties to assist in obtaining the necessary information.

When a Contracting Party receives a request for assistance, that Contracting Party (assisting party) shall render legal **or** administrative assistance in order to produce the requested information/evidence to the extent possible and submit it to the requesting Contracting Party (requesting party).

Requests for such legal or administrative assistance could include the following actions:

- search for a suspected ship, identification of the master and/or other responsible persons;
- reporting of a possible discharge; taking of samples from ships and/or spillages;
- analyses of samples (if possible, the  $_{\rm gas}$  chromatography/mass spectrometry (GC/MS) method should be used);
- inspection and/or copying of ship's documents (logbook, oil record book, cargo record book, etc.);
- obtaining of statements from ship's personnel;
- inspection of certain equipment on board ships;
- inspection of slop and oily-water collecting tanks;
- inspection of cargo (dumping);
   verification of registration, owner of ship, insurance, etc.; and
- collection of other evidence.

The legal or official administrative assistant should be directed towards the gathering of sufficient evidence to establish whether the ship has violated the discharge requirements. Guidelines for the optimal collection of evidence relating to contravention of MARPOL 73/78 Annex I discharge provisions can be found in Appendix 2 to IMO Assembly Resolution A.542(13) which is attached as Annex 1. Similar guidelines relating to MARPOL 73/78 Annex II are contained in Appendix 2 to IMO Resolution MEPC 26(23) which 2 is attached as Annex 2.

Even if these IMO guidelines are related only to possible evidence on alleged contravention of MARPOL 73/78 Annexes I and II discharge provisions parts of the guidelines will also be of value when collecting evidence under Article 9 of the Convention.

When communicating results of actions requested by another Contracting Party, it should be borne in mind that evidence provided should be presented in such a way as to facilitate legal proceedings against the offender by the flag state and/or by the Contracting Party under whose jurisdiction the offence has taken place.

It should also be noted that the agreed IMO procedures for reporting to flag states should be observed in addition to the procedures initiated under these guidelines. The national authorities co-operating within these 3 guidelines are listed in Annex 3.

APPENDIX 2 to IMO Assembly Resolution A.542(13)

#### CONTRAVENTION OF DISCHARGE PROVISIONS

- 1. Experience has shown that information furnished to the flag State as envisaged in Chapter 3 of the present Procedures is often inadequate to enable the flag State to cause proceedings to be brought in respect of the alleged violation of the discharge requirements. This Appendix is intended to identify information which is often needed by a flag State for the prosecution of such possible violations.
- 2. It is recommended that in preparing a port State report on deficiencies as set out in Appendix 4, where contravention of the discharge requirements is involved, the authorities of the coastal or port State be guided by the itemized list of possible evidence as shown in the Addendum to this Appendix. It should be born in mind in this connection that:
  - .1 the report aims to provide the optimal collation of obtainable data; however, even if all the information cannot be provided, as much information as possible should be submitted;
  - .2 it is important for all the information included in the report to be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention had occurred.
- In addition to the port State report on deficiencies, a report should be completed by a port or coastal State, on the basis of the itemized list of possible evidence. It is important that these reports are supplemented by documents such as:
  - .1 a statement by the observer of the pollution. in addition to the information required under section 1 of the Addendum to this Appendix, the statements should include considerations which lead the observer to conclude that none of any other possible pollution sources is in fact the source;
  - .2 statements concerning the sampling procedures both of the slick and on board. These should include location of and time when samples were taken, identity of person(s) taking the sample and receipts identifying the persons having custody and receiving transfer of the samples;
  - .3 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;

- .4 a statement by the inspector on board together with his rank and organisation;
- .5 statements by persons being questioned;
- .6 statements by witnesses;
- .7 photographs of the oil slick;
- .8 copies of relevant pages of Oil Record Books, logbooks, discharge recordings, etc.

All observations, photographs and documentation should be supported by a signed verification of their authenticity. All certifications, authentications or verifications shall be executed in accordance with the laws of the State which prepares them. All statements should be signed and dated by the person making the statement and, if possible, by a witness to the signing. The names of the persons signing statements should be printed in legible script above or below the signature.

4. The report referred to under paragraphs 2 and 3 above should be sent to the flag State. If the coastal State observing the pollution and the port State carrying out the investigation on board are not the same, the State carrying out the latter investigation should also send a copy of its findings to the State observing the pollution and requesting the investigation.

ADDENDUM TO APPENDIX 2 of IMO Assembly Resolution A.542(13)

## ITEMIZED LIST OF POSSIBLE EVIDENCE ON ALLEGED CONTRAVENTION OF THE MARPOL 73/78 ANNEX I DISCHARGE PROVISIONS

#### 1. ACTION ON SIGHTING OIL POLLUTION

#### 1.1 Particulars of ship or ships suspected of contravention

- 1.1.1 Name of ship
- 1.1.2 Reasons for suspecting the ship
- 1.1.3 Date and time (GMT) of observation or identification
- 1.1.4 Position of ship
- 1.1.5 Flag and port of registry
- 1.1.6 Type (e.g. tanker, cargo ship, passenger ship, fishing vessel), size (estimated tonnage) and other descriptive data (e.g. superstructure, colour and funnel mark)
- 1.1.7 Draught condition (loaded or in ballast)
- 1.1.8 Approximate course and speed
- 1.1.9 Position of slick in relation to ship (e.g. astern, port, starboard)
- 1.1.10 Part of the ship from which discharge was seen emanating
- 1.1.11 Whether discharge ceased when ship was observed or contacted by radio

#### 1.2 Particulars of slick

- 1.2.1 Date and time (GMT) of observation if different from 1.1.3
- 1.2.2 Position of oil slick in longitude and latitude if different from 1.1.4
- 1.2.3 Appropriate distance in nautical miles from the nearest landmark
- 1.2.4 Approximate overall dimension of oil slick (length, width, and percentage thereof covered by oil)
- 1.2.5. Physical description of oil slick (direction and form, e.g. continuous, in patches or in windrows)
- 1.2.6 Appearance of oil slick (indicate categories)
  - Category A: Barely visible under most favourable light condition
  - Category B: Visible as silvery sheen on water surface
  - Category C: First trace of colour may be observed
  - Category D: Bright band of colour
  - Category E: Colours begin to turn dull
  - Category F: Colours are much darker
- 1.2.7 Sky conditions (bright sunshine, overcast, etc.), lightfall and visibility (kilometres) at the time of observation
- 1.2.8 Sea state
- 1.2.9 Direction and speed of surface wind
- 1.2.10 Direction and speed of current

#### 1.3 Identification of the observer(s)

- 1.3.1 Name of the observer
- 1.3.2 Organization with which observer is affiliated (if any)
- 1.3.3 Observer's status within the organization
- 1.3.4 Observervation made from aircraft/ship/shore/otherwise
- 1.3.5 Name or identity of ship or aircraft from which the observation was made

- 1.3.6 Specific location of ship, aircraft, Place on shore **or** otherwise from which observation was made
- 1.3.7 Activity engaged in by observer when observation was made, for example: patrol, voyage, flight (en route from . . . to . ..), etc.

#### 1.4 Method of observation and documentation

- 1.4.1 Visual
- 1.4.2 Conventional photographs
- 1.4.3 Remote sensing records and/or remote sensing photographs
- 1.4.4 Samples taken from slick
- 1.4.5 Any other form of observation (specify)

# Note: A photograph of the discharge should preferably be in colour. Photographs can provide the following information: that the material on the sea surface is oil, that the quantity of oil discharged does constitute a violation of the Convention, that the oil is being, or has been discharged from a particular ship, the identity of the ship.

Experience has shown that the aforementioned can be obtained with the following three photographs:

- .1 Details of the slick taken almost vertically down from an altitude of less than 300 m with the sun behind the photographer.
- .2 An overall view of the ship and "slick" showing oil emanating from a particular ship.
- .3 Details of the ship for the purposes of identification.

#### 1.5 Other information if radio contact can be established

- 1.5.1 Master informed of pollution
- 1.5.2 Explanation of master
- 1.5.3 Ship's last port of call
- 1.5.4 Ship's next port of call
- 1.5.5 Name of ship's master and owner
- 1.5.6 Ship's call sign

#### 2. INVESTIGATION ON BOARD

#### 2.1 Inspection of the IOPP Certificate

- 2.1.1 Name of ship
- 2.1.2 Distinctive number or letters
- 2.1.3 Port of registry
- 2.1.4 Type of ship
- 2.1.5 Date and place of issue
- 2.1.6 Date and place of endorsement

Note: If the ship is not issued with an IOPP Certificate as much as possible of the requested information should be given.

#### 2.2 Inspection of supplement of the IOPP Certificate

- 2.2.1 Applicable paragraphs of section 2, 3, 4, 5 and 6 of the supplement (non-oil tankers)
- 2.2.2 Applicable paragraphs of sections 2, 3, 4, 5, 6, 7, 8, 9 and 10 of the supplement (oil tankers)
- Note: If the ship does not have an IOPP Certificate, a description should be given of the equipment and arrangements on board, designed to prevent marine pollution.

#### 2.3 Inspection of Oil Record Book (O.R.B.)

- 2.3.1 Copy sufficient pages of the O.R.B. Part I to cover a period of 30 days prior to the reported incident.
- 2.3.2 Copy sufficient pages of the O.R.B. Part II (if on board) to cover a full loading/unloading/ballasting and tank cleaning cycle of the ship. Also copy the tank diagram.

#### 2.4 Inspection of logbook

- 2.4.1 Last port, date of departure, draught forward and aft
- 2.4.2 Current port, date of arrival, draught forward and aft
- 2.4.3 Ship's position at or near the time the incident was reported
- 2.4.4 Spot check if positions mentioned in the logbook agree with positions noted in the 0.R.B

#### 2.5 Inspection of other documentation on board

- 2.5.1 Other documentation relevant for evidence (if necessary make copies) such as:
  - recent ullage sheets
  - records of monitoring and control equipment

#### 2.6 Inspection of ship

- 2.6.1 Ship's equipment in accordance with the supplement of the IOPP Certificate
- 2.6.2 Samples taken. State location on board.
- 2.6.3 Traces of oil in vicinity of overboard discharge outlets
- 2.6.4 Condition of engine room and contents of bilges
- 2.6.5 Condition of oily water separator, filtering equipment and alarm, stopping or monitoring arrangements
- 2.6.6 Contents of sludge an/or holding tanks
- 2.6.7 Sources of considerable leakage

On oil tankers the following additional evidence may be pertinent:

- 2.6.8 Oil on surface of segregated or dedicated clean ballast
- 2.6.9 Condition of pump-room bilges
- 2.6.10 Condition of COW system
- 2.6.11 Condition of IG system
- 2.6.12 Condition of monitoring and control system
- 2.6.13 Slop tank contents (estimate quantity of water and of oil)

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#### 2.7 Statements of persons concerned

- If the O.R.B Part I has not been properly completed information on the following questions may be pertinent:
- 2.7.1 Was there a discharge (accidental or intentional) at the time indicated on the incident report?
- 2.7.2 Is the bilge discharge controlled automatically?
- 2.7.3 If so, at what time was the system last put into operation and at what time was the system last put on manual mode?
- 2.7.4 If not, what were date and time of the last bilge discharge?
- 2.7.5 What was the date of the last disposal of residue and how was the disposal effected?
- 2.7.6 Is it usual to effect discharge of bilge water directly to the sea or to store bilge water first in a collecting tank? Identify the collecting tank.
- 2.7.7 Have oil fuel tanks recently been used as ballast tanks?
- If the O.R.B. Part II has not been properly completed information on the following questions may be pertinent:
- 2.7.8 What was the cargo/ballast distribution in the ship on departure from the last port?
- 2.7.9 What was the cargo/ballast distribution in the ship on arrival in the current port?
- 2.7.10 When and where was the last loading effected?
- 2.7.11 When and where was the last unloading effected?
- 2.7.12 When and where was the last discharge of dirty ballast?
- 2.7.13 When and where was the last cleaning of cargo tanks?
- 2.7.14 When and where was the last COW operation and which tanks were washed?
- 2.7.15 When and where was the last decanting of slop tanks?
- 2.7.16 What is the ullage in the slop tanks and the corresponding height of interface?
- 2.7.17 Which tanks contained the dirty ballast during the ballast voyage (if ship arrived in ballast)?
- 2.7.18 Which tanks contained the clean ballast during the ballast voyage (if ship arrived in ballast)?

In addition, the following information may be pertinent:

- 2.7.20 Contents of oil fuel and ballast tanks
- 2.7.21 Previous and next bunkering, type of oil fuel
- 2.7.22 Availability **or** non-availability of reception facilities for oily wastes during the present voyage
- 2.7.23 Internal transfer of oil fuel during the present voyage

In the case of oil tankers the following additional information may be pertinent:

- 2.7.24 The trade the ship is engaged in such as short/long distance, crude or product or alternating crude/ product, lightening service, oil/dry bulk
- 2.7.25 Which tanks clean and dirty
- 2.7.26 Repairs carried out or envisaged in cargo tanks

#### Miscellaneous information:

- 2.7.27 Comments in respect to condition of ship's equipment
- 2.7.28 Comments in respect to pollution report
- 2.7.29 Other comments

#### 3. INVESTIGATION ASHORE

#### 3.1 Analyses of oil samples

3.1.1 Indicate method and results of the sample analyses

#### 3.2 <u>Further information</u>

3.2.1 Additional information on the ship, obtained from oil terminal staff, tank cleaning contractors or shore reception facilities may be pertinent

<u>Note:</u> Any information under this heading is, if practicable, to be corroborated by documentation such as signed statements, invoices, receipts, etc.

#### 4. INFORMATION NOT COVERED BY THE FOREGOING

#### 5. CONCLUSION

- 5.1.1 Summing up of the investigator's conclusions
- 5.1.2 Indication of applicable provisions of Annex I of MARPOL 73/78 which the ship is suspected of having contravened
- 5.1.3 Did the results of the investigation warrant the filing of a deficiency report?

#### HELCOM Recommendation 10/8 Attachment Annex 2

APPENDIX 2 to IMO Resolution MEPC 26(23)

#### CONTRAVENTION OF **DISCHARGE** PROVISIONS

- 1. With illegal discharges under Annex I of MARPOL 73/78, past experience has shown that information furnished to the flag State is often inadequate to enable the flag State to cause proceedings to be brought in respect of the alleged violation of the discharge requirements. This appendix is intended to identify information which will be needed by a flag State for the prosecution of violations of the discharge provisions under Annex II.
- 2. It is recommended that in preparing a port State report on deficiencies as set out in appendix 4, where **conravention** of the discharge requirements is involved, the authorities of the coastal or port State be guided by the itemized list of possible evidence as shown in the addendum to this appendix. It should be borne in mind in this connection that:
  - .1 the report aims to provide the optimal collation of obtainable data; however, even if all the information cannot be provided, as much information as possible should be submitted; and
  - .2 it is important for all the information included in the report to be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention has occurred; and
  - .3 the discharge may have been oil, in which case appendix 2 of the Annex I Control Procedures applies.
- 3. In addition to the port State report on deficiencies, a report should be completed by a port or coastal State, on the basis of the itemized list of possible evidence. It is important that these reports are supplemented by documents such as:
  - .1 a statement by the observer of the pollution. In addition to the information required under section 1 of the addendum to this appendix, the statement should include considerations which have led the observer to conclude that none of any other possible pollution source is in fact the source;
  - .2 statements concerning the sampling procedures both of the slick and on board. These include location of and time when samples were taken, identity of person(s) taking the sample and receipts identifying the persons having custody and receiving transfer of the samples;

- .3 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;
- .4 a statement by the surveyor on board together with his rank and organization;
- .5 statements by persons being questioned;
- .6 statements by wittnesses;
- .7 photographs of the slick, and
- .8 copies' of relevant pages of the Cargo Record Book, logbooks, discharge recordings, etc.
  - All observations, photographs and documentation should be supported by a signed verification of their authenticity. All certifications, authentications or verifications shall be executed in accordance with the laws of the State which prepares them. All statements should be signed and dated by the person making the statement, if possible, by a witness to the signing. The names of the persons signing statements should be printed in legible script above or below the signature.
- 4. The report referred to under paragraphs 2 and 3 above should be sent to the flag State. If the coastal State observing the pollution and the port State carrying out the investigation on board are not the same, the State carrying out the latter investigation should also send a copy of its findings to the State observing the pollution and requesting the investigation.

#### ADDENDUM TO APPENDIX 2 of IMO Resolution MEPC 26(23)

## ITEMIZED LIST OF POSSIBLE EVIDENCE ON ALLEGED CONTRAVENTION OF THE MARPOL 73/78 ANNEX II DISCHARGE PROVISIONS

#### 1. ACTION ON SIGHTING POLLUTION

#### 1.1 Particulars of ship or ships suspected of contravention

- 1.1.1 Name of ship
- 1.1.2 Reasons for suspecting the ship
- 1.1.3 Date and time (UTC) of observation or identification
- 1.1.4 Position of ship
- 1.1.5 Flag and port of registry
- 1.1.6 Type (e.g. tanker, cargo ship, passeger ship, fishing vessel), size (estimated tonnage) and other descriptive data (e.g. superstructure colour and funnel mark)
- 1.1.7 Draught condition (loaded or in ballast)
- 1.1.8 Approximate course and speed
- 1.1.9 Position of slick in relating to ship (e.g. astern, port, starboard)
- 1.1.10 Part of the ship from which discharge was seen emanating
- 1.1.11 Whether discharge ceased when ship was observed or contacted by radio

#### 1.2 Particulars of slick

- 1.2.1 Date and time (UTC) of observation if different from 1.1.3
- 1.2.2 Position of slick in longitude and latitude if different from 1.1.4
- 1.2.3 Approximate distance in nautical miles from the nearest land
- 1.2.4 Depth of water according to sea chart
- 1.2.5 Approximate overall dimension of slick (length, width and percentage thereof covered)
- 1.2.6 Physical description of slick (direction and form, e.g. continuous, in patches or in windows)
- 1.2.7 Colour of slick
- 1.2.8 Sky conditions (bright sunshine, overcast, etc.), lightfall and visibility (kms) at the time of observation
- 1.2.9 Sea state
- 1.2.10 Direction and speed of surface wind
- 1.2.11 Direction and speed of current

#### 1.3 **Idetification** of the observer(s)

- 1.3.1 Name of the observer
- 1.3.2 Organization with which observer is affiliated (if any)
- 1.3.3 Observer's status within the organisation
- 1.3.4 Observation made from aircraft/ship/shore/otherwise
- 1.3.5 Name or identity of ship or aircraft from which the observation was made
- 1.3.6 Specific location of ship, aircraft, place on shore or otherwise from which observation was made
- 1.3.7 Activity engaged in by observer when observation was made, for example: patrol, voyage (flight en route from...to...) etc.

#### 1.4 Method of observation and documentation

- 1.4.1 Visual
- 1.4.2 Conventional photographs
- 1.4.3 Remote sensing records and/or remote sensing photographs
- 1.4.4 Samples taken form slick
- 1.4.5 Any other form of observation (specify)

## Note: A photograph of the discharge should preferably be in colour. The best results may be obtained with the following three photographs:

- .1 details of the slick taken almost vertically down from an altitude of less than 300 metres with the sun behind the photographer;
- .2 an overall view of the ship and "slick" showing a substance emanating from particular ship; and
- .3 details of the ship for the purposes of identification.

#### 1.5 Other information if radio contact can be established

- 1.5.1 Master informed of pollution
- 1.5.2 Explanation of master
- 1.5.3 Ship's last port of call
- 1.5.4 Ship's next port of call
- 1.5.5 Name of ship's master and owner
- 1.5.6 Ship's call sign

#### 2. INVESTIGATION ON BOARD

#### 2.1 Inspection of the Certificate (COF or NLS Certificate)

- 2.1.1 Name of ship
- 2.1.2 Distinctive number or letters
- 2.1.3 Port of registry
- 2.1.4 Type of ship
- 2.1.5 Date and place of issue
- 2.1.6 Date and place of endorsement

#### 2.2 Inspection of P and A Manual

- 2.2.1 List of Annex II substances the ship is permitted to carry
- 2.2.2 Limitations as to tanks in which these substances may be carried
- 2.2.3 Ship equipped with an efficient stripping system
- 2.2.4 Residue quantities established at survey

#### 2.3 Inspection of Cargo Record Book (CRB)

2.3.1 Copy sufficient pages of the CRB to cover a full loading/ unloading/ballasting and tank cleaning cycle of the ship. Also copy the tank diagram

#### 2.4 Inspection of logbook

- 2.4.1 Last port, date of departure, draught forward and aft
- 2.4.2 Current port, date of arrival, draught forward and aft
- 2.4.3 Ship's position at or near the time the incident was reported
- 2.4.4 Spot check if times entered in the Cargo Record Book in respect of discharges correspond with sufficient distance form the nearest land, the required ship's speed and with sufficient water depth

#### 2.5 Inspection of other documentation on board

- 2.5.1 Other documentation relevant for evidence (if necessary make copies) such as:
  - cargo documents of cargo presently or recently carried, together with relevant information on required unloading temperature, viscosity and/or melting point
  - records of temperature of substances during unloading
  - records of monitoring equipment if fitted

#### 2.6 Inspection of ship

- 2.6.1 Ship's equipment in accordance with the P and A Manual
- 2.6.2 Samples taken; state location on board
- 2.6.3 Sources of considerable leakage
- 2.6.4 Cargo residues on surface of segregated or dedicated clean ballast
- 2.6.5 Condition of pumproom bilges
- 2.6.6 Condition of monitoring system
- 2.6.7 Slop tank contents (estimate quantity of water and residue)

#### 2.7 Statements of persons concerned

If the CR8 has not been properly completed, information on the following questions may be pertinent:

- 2.7.1 Was there a discharge (accidental or intentional) at the time indicated on the incident report?
- 2.7.2 Which tanks are going to be loaded in the port?
- 2.7.3 Which tanks needed cleaning at sea? Had the tanks been prewashed?
- 2.7.4 When and where were these cleaned?
- 2.7.5 Residues of which substances were involved?
- 2.7.6 What was done with the tankwashing slops?
- 2.7.7 Was the slop tank, or cargo tank used as a slop tank, discharged at sea?
- 2.7.8 When and where was the discharge effected?
- 2.7.9 What are the contents of the slop tank or cargo tank used as slop tank?
- 2.7.10 Which tanks contained the dirty ballst during the ballast voyage (if ship arrived in ballst)?
- 2.7.11 Which tanks contained the clean ballst during the ballast voyage (if ship arrived in ballast)?
- 2.7.12 Details of the present voyage of the ship (previous ports, next ports, trade)
- 2.7.13 Difficulties experienced with discharge to shore reception facilities

- 2.7.14 Difficulties experienced with efficient stripping operations
- 2.7.15 Which tanks are clean or dirty on arrival?
- 2.7.16 Repairs carried out or envisaged in cargo tanks

#### Miscellaneous information

- 2.7.17 Comments in respect of condition of ship's equipment
- 2.7.18 Comments in respect of pollution report
- 2.7.19 Other comments

#### 3. INVESTIGATION ASHORE

#### 3.1 Analyses of samples

3.1.1 Indicate method and results of the samples' analyses

#### 3.2 Furhter information

3.2.1 Additional information on the ship, obtained from terminal staff, tank cleaning contractors or shore reception facilities may be pertinent

Note: Any information under this heading is, if practicable, to be corroborated by documentation such as signed statements, invoices, receipts, etc.

#### 3.3 Information from previous unloading port terminal

- 3.3.1 Confirmation that the ship unloaded, stripped or prewashed in accordance with its P and A Manual
- 3.3.2 The nature of difficulties if any
- 3.3.3 Restrictions by authorities under which the ship was permitted to sail
- 3.3.4 Restrictions in respect of shore reception facilities
- 4. INFORMATION NOT COVERED BY THE FOREGOING

#### 5. CONCLUSION

- 5.1 Summing up of the investigator's conclusions
- 5.2 Indication of applicable provisions of Annex II to MARPOL 73/78 which the ship is suspected of having contravened
- 5.3 Did the results of the investigation warrant the filing of a dificiency report?

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#### NATIONAL AUTHORITIES CO-OPERATING WITHIN THE GUIDELINES

**DENMARK** Ministry of the Environment

National Agency for Environmental Protection

Strandgade 29

DK-1401 COPENHAGEN K.

<u>Tel</u>: 45-1-578310

Tlx: 31209 miljoe dk

Telefax: 45-1-572449

- requests for Flag Officer Denmark (FOD)

assistance Postbox 483

(day and night) DK-8100 AARHUS C.

Tel: 45-6-123099

Tlx: 64471 sok dk

Telefax: 45-6-123011-(after tone)5155

FINLAND National Board of Navigation

Vuorimiehenkatu 1 SF-00140 HELSINKI

Tel: 358-o-18081

Tlx: 121471 mkh sf

Telefax: 358-o-1808355

- requests for Headquarters of the Coast Guard of

assistance the Gulf of Finland Region

(outside office

Tel:

hours)

Tlx: 124777 slmjk sf

358-0-174882

Telefax: 358-o-631670

GERMAN DEMOCRATIC

REPUBLIC

GDR Board of Navigation and

Maritime Affairs

Patriotischer Weg 120 DDR-2500 ROSTOCK

Tel: 37-81-52446

Tlx: 31268 rccros dd

- requests for

assistance

(day and night)

same

FEDERAL REPUBLIC OF

**GERMANY** 

Zentraler Meldekopf beim Wasser- und

Schiffahrtsamt

Cuxhaven

Radarturm "Alte Liebe"

D-2190 CUXHAVEN

Tel: 49-4721-106380,

-106381, -106485

Tlx: 232154 swdcx d

232205 **rvzcx** d **232263** elgcx d

Telefax: 49-4721-106404

- requests for

assistance

(day and night)

same

**POLAND** 

Maritime Board in Gdynia **Urzad** Morski w Gdyni

Ul. Chrzanowskiego 10

81-338 GDYNIA

Tel: 48-58-216162,

-206911, -217738

Tlx: 54285 umor pl

- requests for

assistance

(day and night)

same

SWEDEN National Administration of Shipping

and Navigation

Maritime Inspectorate s-601 78 NORRKÖPING

Tel: 46-11-191000

Tlx: 64380 shipadm s

Telefax: 46-11-101949

- requests for assistance (day and night)

Swedish Coast Guard Communications Centre

Eastern Region

Box 27224

S-102 53 STOCKHOLM

Tel: 46-8-7897640

Tlx: 17198 tulsths

Telefax: 46-a-6675067

UNION OF SOVIET SOCIALIST REPUBLICS

Emergency Division of the

Baltic Shipping Co.

1, Elevatornaya Ploshchadka

LENINGRAD, 198096

Tel: 1849808

Tlx: 121512 rcc su

Cable: ASPTR Morflot Leningrad

- requests for assistance (day and night)

same

## BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

#### . HELSINKI COMMISSION .



HELCOM RECOMMENDATION 10/9

Adopted 15 February 1989, having regard to Article 24 of the Helsinki Convention

#### AMENDMENT TO REGULATION 8 OF ANNEX IV OF THE HELSINKI CONVENTION

THE COMMISSION,

RECALLING that Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), entered into force on 31 December 1988,

RECALLING ALSO that certain provisions of Annex V of MARPOL 73/78 are included in Regulation 8 of Annex IV of the Helsinki Convention,

RECALLING FURTHER HELCOM Recommendation 8/4 concerning Amendments to Regulations 1-5 of Annex IV and Appendices I-IV to Annex IV of the Helsinki Convention,

RKCOGNIZING that as from 1 July 1986 all Contracting Parties to the Helsinki Convention are also parties to MARPOL 73/78 and also bound by the provisions of Annex V of MARPOL 73/78 with regard to the protection of the marine environment of the Baltic Sea Area from pollution from ships,

JXECOGNIZING ALSO that the 26th session of the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) decided that the requirements of Regulation 5 of Annex V of MARPOL 73/78 should take effect from 1 October 1989 in the Baltic Sea Area,

CONSIDERING that, as a result of the developments in respect of MARPOL 73/78, there is no need to retain in the Helsinki Convention texts which reproduce provisions of Annex V of MARPOL 73/78,

TAKING INTO CONSIDERATION the amendment procedure for the Annexes of the Helsinki Convention, as contained in Article 24 of the Convention,

#### **RESOLVES:**

- a) to adopt the amendment to Regulation 8 of Annex IV of the Convention appearing in the Annex to this Recommendation;
- b) to ask the Depository Government to communicate the amendment to the Contracting Parties with the Commission's recommendation for acceptance;
- c) to determine that the amendment shall be deemed to have been accepted unless prior to 1 July 1989, any of the Contracting Parties has objected to the amendment; and
- d) to determine that the accepted amendment shall enter into force on 1 October 1989.

## HELCOM RECOMMENDATION 10/9 Annex

1. Regulation 8 of Annex IV of the Helsinki Convention is amended as follows:

"Regulation 8

Garbage

The Contracting Parties, also being parties to MARPOL 73/78, apply in conformity with that agreement the provisions of Annex V of MARPOL 73/78 for the prevention of pollution by garbage from ships."

## BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

. HELSINKI COMMISSION .



#### HELCOM RECOMMENDATION 10/10

Adopted 15 February 1989, having regard to Article 10 of the Helsinki Convention

## MEASURES IN ORDER TO MINIMIZE POLLUTION FROM OFFSHORE INSTALLATIONS

#### THE COMMISSION,

RECALLING that according to Article 10 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), the Contracting Parties shall take appropriate measures in order to prevent pollution of the marine environment of the Baltic Sea Area resulting from exploration or exploitation of the sea-bed and its subsoil or from any associated activities thereon, and also ensure that adequate equipment is at hand to start an immediate abatement of pollution in that area,

NOTING HELCOM Recommendation 9/5 concerning restriction of discharges and monitoring for exploration and exploitation of the sea-bed and its subsoil,

NOTING ALSO HELCOM Recommendation 1/8 on minimization of the use of dispersants, sinking agents and absorbents in oil combatting operations in the Baltic Sea Area,

BEING AWARE of HELCOM Recommendation 1/7 concerning the development of national ability to combat spillages of oil,

RECALLING ALSO Regulation 5 of Annex VI to the Helsinki Convention concerning combatting of spillages of oil and other harmful substances at the sea,

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

a) Contingency plans for combatting pollution of the sea from offshore installations are drawn up before the installations are taken into use,

The contingency plan shall contain information on the following particulars:

- (i) Alarm and communication systems, including warning of authorities and note on language to be used;
- (ii) Organisation, including details on operational management, personnel, responsibilities and procedure for initiating the contingency measures and/or national reporting centers (NRC);
- (iii) List of contingency equipment with description on type, and indication of capacity and location;

- (iv) Description of measures to be taken at different pollution incidents, including combatting methods, surveillance, supply and transport questions, personnel as well as provisional storage and disposal of pollutants etc.;
- (v) Training,
- b) The equipment for mechanical combatting of oil pollution must be able to fulfil the following requirements:
  - (i) The quantity of equipment shall be sufficient to combat spills corresponding to the discharge of oil from a production drilling, a production platform or a pipeline, with due regard to evaporation and emulsification of the oil;
    - For exploration drilling the quantity of equipment shall be sufficient to combat spills of oil corresponding to the probable discharge with due regard to the geological location of the drilling site, and to evaporation and emulsification of the oil;
  - (ii) Oil recovery systems, booms and transport material shall be designed to be operational under the conditions of wave height and current prevailing in the waters involved, limited to a significant wave height up to 2,5 m and/or a current velocity of up to 1 knot. Moreover, the equipment shall be able to operate efficiently under prevailing temperature conditions in the actual areas (due to blow-out situations);
  - (iii) Combatting equipment which is liable to be used under ice conditions, must be well tested for this purpose;
  - (iv) The equipment should be located so that retaining measures can be taken at a sufficiently early stage with due regard to the environmental sensitivity and geological conditions of the area in which the exploration or exploitation activity is going to take place and the total contingency plan can be put into action within less than 8 hours taking into consideration the geographical location of the marine installation;
  - (v) Each Contracting Party shall report to the CC about the consideration that has been made and the conditions required for each separate offshore activity according to regulation b) (iv) above.
- c) The equipment for chemical combatting of oil pollution must be able to fulfil the following requirements:
  - (i) The quantity of equipment and dispersants shall be sufficient to combat spills corresponding to the discharge of oil from a production drilling or a pipeline for a specified period of time, with due regard to the geological conditions and geographical location of the drilling site, and to evaporation and emulsification of the oil;
  - (ii) The equipment shall be located so that the combatting measures can be instituted within a specified time limit (less than 8 hours) taking into consideration the geographical location of the marine installation,

- d) The equipment for combatting of pollution caused by harmful substances other than oil, if used in significant quantities, must be able to fulfil the following requirements:
  - (i) The quantity and type of equipment shall be dimensioned in order to enable the user to measure and report on the extent and location of the pollution, as well as to reduce the discharge of the substances;
  - (ii) Where pollutants remain floating on the surface of the water and are not easily soluble in water, the user shall be able to encircle, take up and transport the pollutants under the weather conditions specified in Paragraph b) (ii);
  - (iii) In such cases the equipment shall be sufficient to allow combatting of the substances present at that time;
  - (iv) The equipment shall be located so that contingency measures can be taken immediately,
- e) Other Contracting Parties, with borders to the sea area where offshore activities take place, shall be informed about the contingency measures taken, for combatting pollution of the sea;
  - (i) The information shall be given in due time before the offshore activities are started up.

### BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION

. HELSINKI COMMISSION .



HELCOM RECOMMENDATION IO/II

Adopted 15 February 1989, having regard to Article 17 of the Helsinki Convention

INTERNATIONAL COOPERATION ON LIABILITY FOR DAMAGE RESULTING FROM VESSEL-BASED POLLUTION

THE COMMISSION,

**RECALLING** that under Article 17 the Contracting Parties undertake, as soon as possible, jointly to develop and accept rules concerning responsiblity for damage, resulting from acts or omissions in contravention of the present Convention,

NOTING the importance of the achievements made within the International Maritime Organization as regards liability regimes for vessel-based pollution,

NOTING FURTHER the current work within that Organization to develop a liability regime for damage resulting from the maritime carriage of hazardous and noxious substances,

**RECOGNIZING** that the cooperation between the Baltic Sea States within the International Maritime Organization in matters relating to the protection of the marine environment of the Baltic Sea Area from vessel-based pollution should be further enhanced,

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

- a) accede to existing Conventions concluded under the auspices of the International Maritime Organization, such as the system created by the 1969 International Convention on Civil Liability for Oil Pollution Damage and the 1971 International Convention on the Establishment of the International Oil Pollution Fund, as well as the 1984 Protocols thereto, and the 1971 Convention relating to Civil Liability in the field of Maritime Carriage of Nuclear Material,
- b) cooperate fully within the International Maritime Organization with a view to elaborating further regimes on liability for pollution damage, such as the current project on a Convention on liability for damage caused by the maritime carriage of hazardous and noxious substances.

#### List of meetings, seminars and workshops under the auspices of the Helsinki Commission as agreed by the Tenth Meeting of the Commission

<b>27-28</b> February 1989 Sweden	Informal Expert Meeting on Follow-up of Implementation of the Ministerial Declaration and HELCOM Recommendations
12 March 1989 London, Great Britain	Baltic Maritime Coordinating Meeting (BMCM)
13-15 March 1989 Stockholm area, Sweden	ATMOS/EGAP Intercalibration Workshop on Collection and Analysis of Atmospheric Trace Metals
16-17 March 1989 Stockholm area, Sweden	Informal Workshop for Consideration of the the Outcome of the Second Stage of Intercalibration (airborne pollution monitoring)
April 1989 on board RV "Valdivia"	Workshop of Experts on Petroleum Hydrocarbons
4-6 April 1989 Stockholm, Sweden	Seminar on Environmental Questions with Regard to Pulp and Paper Industry
4 and 5 April 1989 Stockholm, Sweden	Meeting of HELCOM Experts on Pulp and Paper Industry
13-15 April 1989 Sopot, Poland	Informal Expert Meeting for preparation of Chapters for the Second Periodic Assessment in conjunction with ICES Baltic Marine Environment Meeting
18-20 April 1989 Copenhagen, Denmark	Sixth Meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EGAP 6)
3-6 May 1989 Tallinn. USSR	Third Meeting of the ad hoc Group of Experts Experts for the Preparation of the Second Periodic Assessment (GESPA 3)
17 May 1989 Finland	Meeting of Experts on Protection of Seals
18-19 May 1989 Hamburg, Federal Republic of Germany	Informal Expert Meeting on Regulation 7 of Annex IV of the Helsinki Convention
22-26 May 1989 Rønne, Denmark	Twelfth Meeting of the Working Group on Criteria and Standards for Discharges of Harmful Substances into the Baltic Sea Area (WGS 12)
(24 May 1989 Kristiansand, Norway	Joint Combatting Exercise; invitation by the Copenhagen Agreement)
29 May-2 June 1989 Restock-Warnemiinde, German Democratic	Fourth Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (MORS 4)

Republic

Fifth Meeting of the ad hog Working Group on 30 May-1 June 1989 Group on Combatting Spillages of Harmful Sub-Rostock. German stances Other than Oil (CC CHEM 5) Democratic Republic Tenth Meeting of the Chairmen and Secretariat 13-14 June 1989 Tallinn, USSR of the Helsinki Commission (CASH 10) 28 August- 1 September Biological workshop in relation to the Baltic 1989, Visby, Sweden Monitoring Programme (BMP) 4-6 September 1989 Seminar on Nutrient Removal from Wastewater Tampere, Finland 11-15 September 1989 Second Meeting of the ad hoc Working Group on Helsinki, Finland Reduction of Industrial Discharges (RID 2) September 1989 Meeting of Experts on Pelagic Biology Helsinki, Finland 15th Meeting of the Maritime Committee 25-29 September 1989 Leningrad, USSR (MC 15) 23-27 October 1989 16th Meeting of the Scientific-Technological Sopot, Poland Committee (STC 16) Joint combatting exercise in conjunction October 1989 Sweden with the POLREP 89 alarm exercise 13-17 November 1989 13th Meeting of the Combatting Committee Rostock, German (CC 13) Democratic Republic First Meeting of the ad hoc Working Group on 1989 [ Helsinki, Finland] Air Pollution from Ships Eleventh Meeting of the Baltic Marine 13-16 February 1990 Environment Protection Commission - Helsinki Helsinki, Finland Commission - (HELCOM 11) 20-22 February 1990 Meeting of Experts on Bibliography Sweden April 1990 13th Meeting of the Working Group on Criteria Poland and Standards for Discharges of Harmful Substances into the Baltic Sea Area (WGS 13) Spring 1990 Fifth Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea Poland (MORS 5) Spring 1990 Fourth Meeting of the ad hog Group of Experts Poland for the Preparation of the Second Periodic Assessment (GESPA 4) Spring 1990 Seventh Meeting of the Group of Experts Finland on Airborne Pollution of the Baltic Sea Area (EGAP (EGAP 7)

Autumn 1990 17th Meeting of the Scientific-Technological Committee (STC 17) Denmark 1990 16th Meeting of the Maritime Committee (MC 16) Sweden 14th Meeting of the Combatting Committee 1990, Federal Republic of Germany (CC 14) 18-22 February 1991 Twelfth Meeting of the Baltic Marine Helsinki, Finland Environment Protection Commission - Helsinki Commission - (HELCOM 12) Seminar on Reception Facilities Spring 1991 Autumn 1991 18th Meeting of the Scientific-Technological Committee (STC 18) USSR 1991, German 17th Meeting of the Maritime Committee Democratic Republic (MC 17) Autumn 1992 19th Meeting of the Scientific-Technological

Committee (STC 19)

Finland

#### 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
  - HELCOM Recommendations passed during 1980 (1981)
- No. 4 BALTIC MARINE ENVIRONMENT BIBLIOGRAPHY 1970-1979 (1981)

Protection Commission during 1980

- 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-Z: 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,
  Ronne, Denmark
  (1983)

- 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)

- 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, Norrkoping, Sweden (1987)
- No. 22 SEMINAR ON OIL POLLUTION QUESTIONS 19-20 November 1986, Norrkoping, 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 (1988)
- No. 27C GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE THIRD STAGE; PART C. HARMFUL SUBSTANCES IN BIOTA AND SEDIMENTS (1988)
- 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)

<sup>•</sup> out of print