HELCOM Manual on
Co-operation in Response to Marine Pollution
within the framework of
the Convention on the Protection of the Marine Environment
of the Baltic Sea Area, (Helsinki Convention)

Volume 1

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Volume 1

PREFACE

The Manual

The HELCOM Manual on Co-operation in Response to Marine Pollution (in the following the Manual) is applied by the Baltic Sea States in operational co-operation, surveillance activities and combatting exercises since 1983. The present Manual consists of two Volumes; Volume 1 dealing generally with co-operation in combatting marine pollution and Volume 2 dealing specifically with such co-operation in case of spillages of chemicals.

The Manual is recommended to be used as guidance when two or more Contracting Parties to the Helsinki Convention participate in a joint action in responding to spillages of oil and other harmful substances, i.e. chemicals.

The Manual should be regarded as practical implementation of the OPRC Convention.

Volume 1

Chapters 1-6 are of operational character containing information of use during a combatting operation. This includes information about Contact Points to Contracting Parties, which assistance and under what conditions this can be obtained from other Contracting Parties, information about delimitation of response regions between Contracting Parties, formats for how to exchange information between combatting authorities about a pollution incident/threat hereof, a description of the actual operational co-operation, including command and communication structures as well as guidelines for oil sampling.

Chapters 7 -12 are of administrative character. They contain information about co-operation on aerial surveillance, organizational and financial aspects in case of operational co-operation, information on types of combatting exercises, relevant extracts from the Helsinki Convention as well as relevant HELCOM Recommendations and Guidelines.

Volume 2

Volume 2 deals only with spillages of chemicals. This volume is intended for use by On-Scene-Commanders.

Detection of illegal discharges

Matters related to co-operation in investigations of anti-pollution regulations are dealt with by the Helsinki Commission. Although not constituting a part of the co-operation in combatting marine pollution the conduction of aerial surveillance does as one of its main aims have the detection of illegal discharges and the collection of evidence in order to prosecute suspected offenders. More information regarding this issue can be found in the “Guidelines on Ensuring Successful Convictions of Offenders of Anti-pollution Regulations at Sea” (Baltic Sea Environment Proceedings No. 78, 2000).

Updating of the Manual

The Manual is saved in a word processing format and distributed to the users in loose-sheet folders and on diskettes. Furthermore, parts of Volume 1 and Volume 2 of the Manual are available in the HELCOM web-site (http://www.helcom.fi).

The updating of the Manual is the responsibility of the Secretariat of the Helsinki Commission in accordance with information received from the Contracting Parties concerning changes in the organization of their combatting authorities and/or improvement of their national abilities to combat marine pollution, or in accordance with instructions given by the Sea-based Pollution Group (as far as they do not concern fundamental revision) or decisions of the Helsinki Commission. The Contracting Parties shall submit their amendments to the meetings of HELCOM SEA. The amendments will be disseminated by the Secretariat in two months. Whenever any chapter of the Manual is revised the revised text will be circulated to the addressees accompanied by a revised Table of Contents showing the current reference of each chapter. However, a Contracting Party is requested to immediately inform other Contracting Parties and the Secretariat on substantial changes in their national organization and Contact Points which have an influence on providing and requesting assistance and exchange of information.

In accordance with Regulation 11 of Annex VII of the 1992 Helsinki Convention the Contracting Parties agree to apply, as far as practicable, the principles and rules indicated in the Manual.

The Manual was adopted by the Helsinki Commission at its 17th meeting in March 1996 according to HELCOM Recommendation 17/13. A revised version of Volume 1 was approved by HELCOM SEA 3/2001 in May 2001 and a new version of Volume 2 was approved by HELCOM RESPONSE 1/2002 in October 2002.

INTRODUCTION

Operational and general guidelines for co-operation

The co-operation in combatting spillages of oil and other harmful substances in the Baltic Sea area is based on the Helsinki Convention and HELCOM Recommendations on combatting matters, adopted by the Helsinki Commission.

In accordance with the Helsinki Convention the Contracting Parties shall maintain ability to respond to spillages of oil and other harmful substances into the sea threatening the marine environment of the Baltic Sea area. This ability shall include adequate equipment, ships and manpower prepared for operations in coastal waters as well as on the high seas.

According to the Helsinki Convention the Contracting Parties shall agree bilaterally or multilaterally on those regions of the Baltic Sea Area, in which they should conduct aerial surveillance and take action for combatting or salvage activities whenever a significant spillage of oil or other harmful substance or any incident causing or likely to cause pollution within the Baltic Sea area has occurred or is likely to occur.

In cases where a Contracting Party is not able to cope with a spillage by the sole use of its personnel and equipment, the Contracting Party in question can request combatting assistance from other Contracting Parties starting with those who seem likely also to be affected by the spillage.

The Contracting Parties are advised in addition to this Manual to use the Bonn Agreement Manual on Securing Evidence on Discharges from Ships "Oil Pollution at Sea", as it contains a lot of valuable information for the detection, identification and quantification of oil slicks. Furthermore, reference is made to HELCOM Recommendation 19/16 concerning “Co-operation in investigating violations or suspected violations of discharge and related regulations for ships, dumping and incineration regulations” and to the HELCOM “Guidelines on Ensuring Successful Convictions of Offenders of Anti-pollution Regulations at Sea” (Baltic Sea Environment Proceedings No. 78), describing the co-operation between the Contracting States in the investigation of suspected violations with the overall aim to ensure and enhance the successful conviction of offenders. In addition, the identification of the polluter is of high interest for the responsible operation control authority in case of compensation for expensive clean-up costs and/or serious damage to the marine environment.

The following chapters are meant as help to improve the co-operation in response to marine pollution within the Baltic Sea area. They are meant both for On-Scene-Commanders/-Coordinators conducting multinational response operations and for authorities dealing with national and regional contingency planning.

1. Information by the Contracting Parties

1.1 DENMARK (DK)

National Contact Points

Emergencies (24 hrs)	
Emergency numbers for public use	
Admiral Danish Fleet Operations Centre	**Tel**: +45 89 43 30 99 **Fax**: + 45 89 43 32 30 **E-mail**: o-rum@sok.dk
Operational contact point on 24 hour duty	
Admiral Danish Fleet Operations Centre	**Tel**: +45 89 43 32 03 **Fax**: + 45 89 43 32 30 **E-mail**: o-rum@sok.dk cc: mar-env@fsnaal.dk
Inquiries (office hrs)	
Administrative contact point	
Admiral Danish Fleet Maritime Environment Section PO Box 483 DK-8100 Aarhus C	**Tel**: +45 89 43 33 81 **Fax**: +45 89 43 33 88 **E-mail**: pol.con.den@sok.dk

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following link: http://www.cis.forsvaret.dk/.

1.2 ESTONIA (EE)

National Contact Points

Emergencies (24 hrs)	
Joint Rescue Coordination Centre (JRCC TALLINN) Süsta 15 EE-11712 Tallinn	**Tel**: +372 619 1124 (24 hrs) **Fax**: +372 692 2501 **E-mail**: NCC_estonia@pv.ee **Inmarsat-C**: 581 492480040
Inquiries (office hrs)	
Estonian Environment Inspectorate Kopli 76 EE-10416 Tallinn	**Tel**: +372 660 3333, +372 696 2236 (24 hrs) **Fax**: +372 696 2237 **E-mail**: valve@kki.ee

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following links: http://www.envir.ee/helcom/Resp.htm and http://www.envir.ee/helcom/Eqip.htm.

1.3 EUROPEAN UNION (EU)

Contact Points

Emergencies (24/7)	
MONITORING AND INFORMATION CENTRE (MIC) European Commission DG Environment BU-9 2/177 B-1049 Brussels	**Duty Officer GSM**: +32 2292 2222 **Duty Officer Fax**: +32 2299 0525 **Duty Officer E-mail**: ENV-MIC@ec.europa.eu
European Maritime Safety Agency (EMSA) Cais do Sodré 1249-206 Lisbon Portugal	**Maritime Support Services (MSS)** **Duty Officer Tel**: +351 21 1209 415 **Duty Officer Fax**: +351 21 1209 480 **Duty Officer E-mail**: MaritimeSupportServices@emsa.europa.eu
Inquiries (office hrs)	
European Commission Directorate General for Environment Mrs Pia Bucella Head of the civil protection unit DG Environment BU-9 2/177 B-1049 Brussels	**Tel**: +32 2 295 70 99/+32 2 295 14 43 **Fax**: +32 2 299 03 14 **E-mail**: pia.bucella@ec.europa.eu.

Further information on EMSA's oil recovery vessels and CleanSeaNet satellite monitoring services can be found on the EMSA website under "Pollution Preparedness and Response" at http://www.emsa.europa.eu/end185d014.html.

Users of the DG Environment Community Information System (CIS) can also access this information via redirect from the CIS website http://ec.europa.eu/environment/civil/marin/cis/cis_index.htm.

EUROPEAN COMMUNITY
Response to accidental or deliberate marine pollution

General Information

The European Community arrangements for combating pollution at sea were first established following the **Council Resolution of 26 June 1978**, setting up "an action programme of the European communities on the on the control and reduction of pollution caused by hydrocarbons released at sea. This programme was later supplemented to deal also with other harmful substances.

The role of the European Community was strengthened when the European Parliament and the Council adopted Decision n° 2850 of 20/12/2000 setting up a **Community framework for cooperation in the field of accidental or deliberate marine pollution**. This framework has been established for the period 1 January to 31 December 2006 and its aim is to:

- support and supplement Member States' efforts at national, regional and local levels for the **protection of the marine environment**, coastlines and human health against the risks of accidental or deliberate pollution at sea;

- contribute to **improving the capabilities** of the Member States for response in case of incidents;

- strengthen the conditions for and facilitate **mutual assistance and cooperation** between Member States in this field;

-promote cooperation among Member States in order to provide for **compensation for damage** in accordance with the polluter-pays principle.

The European Commission – DG Environment/Civil Protection Unit – with the help of a Management Committee on Marine Pollution implements the Community framework for cooperation in the field of accidental or deliberate marine pollution via:

- a **Community Information System (CIS)** available on Internet
- a **three-year rolling plan**, which includes several actions such as training, exercises, pilot projects, etc.

The European Community plays also a central role between Member States as contracting party to all major regional conventions and agreements covering regional seas around Europe, such as the Helsinki Convention 1992 for the protection of the Baltic Sea, the Bonn Agreement 1983 for the protection of the North Sea, the Barcelona Convention 1976 for the protection of the Mediterranean Sea and the (not yet ratified) Lisbon Agreement for the protection of the North-East Atlantic.

Community action in the field of response to marine pollution emergencies was reinforced after the Council Decision of 23 October 2001 establishing a **Community Mechanism to facilitate reinforced co-operation in civil protection assistance interventions.**

Moreover, as of May 19th 2004, with the entering into force of Regulation 724/2004, the European Maritime Safety Agency (EMSA) has been entrusted with specific competencies in the field of response to ship-sourced pollution within the Community.

A- The Community response to marine pollution emergencies

Community action in the field of response to marine pollution accidents was reinforced after the Council Decision of 23 October 2001 which established a **Community Mechanism to facilitate reinforced cooperation in civil protection assistance interventions**. This instrument covers both civil protection and marine pollution emergencies.

The general purpose of the Mechanism is, on request, to provide support in the event of an emergency and to facilitate improved co-ordination of assistance intervention provided by the Member States and the Community. The Community Mechanism for civil protection allows to respond to any major disaster inside and outside the EU by co-ordinating requests and offers for assistance between 30 participating states: the EU 25, the three EEA countries Norway, Iceland and Liechtenstein plus Bulgaria and Romania.

The Mechanism consists of a series of elements and actions in particular in the field of emergency preparedness and response:

- the establishment and management of a Monitoring and Information Centre (**MIC**)
- the establishment and management of a Common Emergency Communication and Information System (**CECIS**)
- the identification of intervention teams and other intervention support available in Member States for assistance in the case of an emergency.

The Monitoring and Information Centre (MIC) is operated by the European Commission in Brussels and accessible 24 hours a day. Through the MIC the Commission is ready to provide operational support in the event of an emergency and to facilitate assistance. Any country affected by a major disaster- inside or outside the Union – can launch a request for assistance through the MIC. The MIC immediately forwards the request to the network of contact points in the 30 participating states. It is then up to the individual countries to determine whether they are in a position to offer assistance. The MIC collects the response and informs the requesting State, of the available assistance. The affected country selects the assistance it needs and establishes direct contact with the assisting countries. In that sense, the MIC provides a one stop shop for assistance, allowing the national authorities to save valuable time in the aftermath of a disaster.

The Civil Protection Monitoring Information Centre has to be addressed through the Commission's Contact Point, the Security Office. Contact details are known to the National Contact Point

Experts on site

Different functions have been defined for experts on site during accidents: technical experts, liaison officers and national observers.

If requested by the affected country, the MIC can mobilise and dispatch within a few hours **technical experts** to provide scientific and technical advice regarding response strategy. The duties for the experts can involve, among others the assessment of the specific needs on site. The costs related to the intervention of the taskforce experts are borne by the Commission, including a life and accident insurance.

Liaison officers can act as "on-site" facilitator between the affected Member State and Member States offering assistance in order to help ensure that assistance is being used in the best possible way. The costs related to the intervention of liaison officers are borne by the Commission.

When an accident happens, Member States are usually interested in sending **observers** on the scene. The European Commission may act as co-ordinator if there is a need to organise joint missions of observers coming from national competent authorities. The European Commission normally shoulders expenses for a liaison officer in charge of the organisation and the development of the visit, while the costs for each observer are borne by their own Member State.

Satellite images

The Monitoring and Information Centre has the possibility to request satellite images of the area of the accident in the context of the Charter "Space and Major Disasters".

B- Community Information System

The Community information System (CIS) has been established for the purpose of exchanging data on the preparedness for and response to marine pollution. The CIS consists of a Community home page and National home pages**.**

The Community home page presents *inter alia* the history of the CIS, the legal basis, a summary of oil properties, the impact reference system and the emergency procedures at Community level.

Each National home page contains the Country profile with the corresponding organisation in the field of response to marine pollution, the localisation of stockpiles, ships and aircraft for dealing with marine pollution, the inventory of main means, conditions for their lease, and other relevant information that is introduced by the responsible national authorities.

C- The three-year rolling plan

Each year, the Commission, jointly with Member States, is identifying current and future priorities to be taken into consideration in the three-year rolling plan.

The three-year rolling plan provides for the following types of actions:

a. Training Courses and workshops are organised for the national, regional and local officials in Member States and others involved, thus ensuring that the competent services respond rapidly and efficiently;

b. Exchange of experts - Secondment of experts to another Member State is organised to allow the experts to gain experience or appraise different techniques used or to study the approaches taken within other emergency services or other relevant bodies such as non-governmental organisations with specialist expertise in accidental or deliberate marine pollution;

c. Exercises - They are intended to compare methods, to stimulate cooperation between Member States and to back up progress in and to coordinate the national emergency services;

d. Pilot Projects - These projects are designed to increase the Member States' capacity for response and rehabilitation. They are mainly aimed at improving means, techniques and procedures.

e. Surveys of the environmental impact after an accident - These surveys are designed to evaluate the preventive and remedial measures taken and to largely disseminate their results and the experience acquired to the other Member States.

D- Role of the European Maritime Safety Agency (EMSA)

The European Maritime Safety Agency (EMSA) was established by the Regulation (EC) N° 1406/2002. As of May 19th 2004, with the entering into force of Regulation 724/2004, the Agency has been entrusted with specific competencies in the field of response to ship-sourced pollution within the Community.

The tasks of EMSA in the field of response to ship sourced pollution include:

- Providing Member States and the Commission with technical and scientific assistance in the field of accidental or deliberate pollution by ships and support on request with additional means in a cost efficient way the pollution response mechanisms of Member States, without prejudice to the responsibility of coastal States to have appropriate pollution response mechanisms in place and respecting existing cooperation between Member States in this field.

- Acting in support of the Community framework for cooperation in the field of accidental or deliberate marine pollution established by Decision No 2850/2000/EC of the European Parliament and of the Council of 20 December 2000 setting up a Community framework for cooperation in the field of accidental or deliberate marine pollution and of the Community mechanism in the field of civil protection assistance interventions established by Council Decision 2001/792/EC, Euratom of 23 October 2001 establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions .

- Assisting the Commission, where appropriate, in the preparatory work for updating and developing Community legislation in the field of response to pollution caused by ships, in

particular in line with the development of international legislation in that field. That task includes the analysis of research projects carried out in the field of the prevention of pollution and response to pollution caused by ships.

- Assisting the Commission in the effective implementation of Community legislation on response to pollution caused by ships throughout the Community.

EMSA's activities in the field of combating marine pollution are described in the Action Plan for Oil Pollution Preparedness and Response. Activities are focused on ship sourced pollution, as considered in OPRC 1990 and OPRC HNS Protocol 2000 and are conducted along three distinct lines: operational assistance, co-operation and co-ordination, and information.

Operational Assistance

Starting from the year 2006 EMSA will have a capacity to provide Parties with a technical advice and additional means of combating pollution at sea.

The assistance will be rendered upon request of the Party through the Community Mechanism.

Co-operation and Co-ordination

EMSA as a member of the EC delegation to Regional Agreements is cooperating closely with their working groups. EMSA also intends to co-ordinate various activities within the EU e.g. setting up of a system to exchange exercise observers between regions, improving the response chain, setting up a satellite imagery service centre, etc.

Information

EMSA is in the process of establishing a "centre of knowledge". When this centre will be operational, the Oil Pollution Response Unit of the Agency will have the capacity for gathering, analysing and disseminating best practices, techniques and innovation in the field of oil pollution response, in particular for at-sea oil recovery during large oil spills.

Procedure to Request Pollution Emergency Assistance from EMSA

EMSA has two legal obligations in the field of pollution preparedness and response, as defined in the EMSA Regulation[1]:

- "To provide Member States and the Commission with technical and scientific assistance in the field of accidental or deliberate pollution by ships."
- "To support upon request with additional means in a cost efficient way the pollution response mechanisms of Member States."

As EMSA acts in support of the Community Mechanism for Civil Protection, EU Member States, Candidate States and EFTA countries should request emergency pollution response assistance from EMSA via the European Commission's Monitoring and Information Centre (MIC). The MIC will then transmit any request for assistance to EMSA.

The MIC can be contacted using the following numbers:

MIC EMERGENCY CONTACTS (24/7):
Duty Officer GSM: +32 2292 2222
Duty Officer E-mail: ENV-MIC@ec.europa.eu
Duty Officer Fax: +32 2299 0525

The European Maritime Safety Agency may also be contacted via the following emergency numbers:

EMSA EMERGENCY CONTACTS (24/7):
Maritime Support Services (MSS)
Duty Officer Tel: +351 21 1209 415
Duty Officer Fax: +351 21 1209 480
Duty Officer E-mail: pollution.emergency@emsa.europa.eu

It is emphasised that the process to activate the oil recovery vessels has been contractually settled between the ship providers and EMSA. Accordingly, the contracted companies will only react following written authorisation from the Agency.

Further information on EMSA's oil recovery vessels and CleanSeaNet satellite monitoring services can be found on the EMSA website under "Pollution Preparedness and Response" at http://www.emsa.europa.eu/end185d014.html.

Users of the DG Environment Community Information System (CIS) can also access this information via redirect from the CIS website http://ec.europa.eu/environment/civil/marin/cis/cis_index.htm.

1 Regulation (EC) N° 724/2004 of the European Parliament and of the Council of 31 March 2004 amending Regulation (EC) N° 1406/2002 establishing a European Maritime Safety Agency.

1.4 FINLAND (FI)

National Contact Points

Emergencies (24 hrs)	
Maritime Rescue Coordination Centre (MRCC TURKU) MRCC/Operations Center of the Guard P.O. Box 16 FI-20101 Turku	**Tel**: +358 204 1000 (24 hours) **Fax**: +358 71 872 7019 (24 hours)
Inquiries (office hrs)	
Finnish Environment Institute (SYKE) Duty officer P.O. Box 140 FI-00251 Helsinki	**Tel**: +358 20 610 123 (office hours) **Fax**: +358 9 54 902 478 (office hours)

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following link: http://wwwi.ymparisto.fi/oilspill/helcom/index.htm.

1.5 GERMANY (DE)

National Contact Points

Emergencies (24 hrs)	
Central Command for Maritime Emergencies (CCME) Maritimes Lagezentrum Cuxhaven (MLZ) c/o WSA Cuxhaven Am Alten Hafen 2 D-27472 Cuxhaven	Tel: +49 4721 567 485 / 567 392 Fax: +49 4721 554 744 / 745 Email: mlz@havariekommando.de
Inquiries (office hrs)	
Central Command for Maritime Emergencies (CCME) Maritimes Lagezentrum Cuxhaven (MLZ) c/o WSA Cuxhaven Am Alten Hafen 2 D-27472 Cuxhaven	Tel: +49 4721 567 485 / 567 392 Fax: +49 4721 554 744 / 745 Email: mlz@havariekommando.de

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following link: http://www.havariekommando.de/en/cis/.

1.6 LATVIA (LV)

National Contact Points

Emergencies (24 hrs)	
Maritime Rescue Coordination Centre (MRCC Riga) Meldru iela 5a LV-1015 Riga	**Tel**: +371 67323103 (emergency), +371 29476101, +371 67082070 **Fax**: +371 67320100 **E-mail:** sar@mrcc.lv http://www.mrcc.lv **Inmarsat-C**: 581-427518510 Radio communication - radiotelephony/ DSC / radiotelex/: Rescue Co-ordination Centre maintains constant watch on 2182 kHz , VHF CH 16; call sign **RIGA RESCUE RADIO**. DSC selective call number **002750100** on 2187.5 kHz and VHF CH 70 DSC. Radiotelex- ARQ selective number **6060** RMRCC LV, scanning all GMDSS ARQ distress and safety frequencies.
Inquiries (office hrs)	
Marine and Inland Waters Administration Voleru 2 LV-1007 Riga	**Tel**: +371 9464006 (24 hrs), +371 7469664 (office hrs) **Fax**: +371 7465888, +371 7465595 **E-mail**: jiup@jiup.gov.lv
Maritime Administration of Latvia Trijadibas 5 LV-1048 Riga	**Tel**: +371 7062101 **Fax**: +371 7860082 **E-mail**: lja@lja.bkc.lv

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following links: http://www.lva.gov.lv/spills/legislation.htm and http://www.lva.gov.lv/spills/equip/equip.htm.

1.7 LITHUANIA (LT)

National Contact Points

Emergencies (24 hrs)	
Maritime Rescue Co-ordination Centre of Lithuania Naujoji uosto str. 24 LT-92244 Klaipeda	**Tel**: +370 46 391257, +370 46 391258 **Fax**: +370 46 391309 **E-mail**: mrcc@mil.lt **Radio**: VHF - 16 channel - Klaipeda MRCC MF - 2182 kHz - Klaipeda MRCC DSC - All distress frequencies on MF and HF and 70 channel on VHF - MMSI 002770330 Airband -121,5 MHz - Klaipeda MRCC **Inmarsat** - B: Telephone: 327703310 Telefax: 327703312 Data: 327703313 Inmarsat – C: 427799011
Inquiries (office hrs)	
Klaipeda Regional Environmental Protection Department of the Ministry of Environment Birutes str. 16 LT-92003 Klaipeda	**Tel**: +370 46 314547, +370 46 341607 **Fax**: +370 46 380903, +370 46 341610 **E-mail**: rastine@klrd.am.lt

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following link: http://www.msa.lt/eng/helcom_information.htm.

1.8 POLAND (PL)

National Contact Points

Maritime Rescue Coordination Center (MRCC Gdynia) Maritime Search and Rescue Service ul. Hryniewickiego 10 P.O. Box 375 81-340 Gdynia	**Tel./Fax**: +48 58 620 5551 **Tel./Fax**: +48 58 621 6811 **Fax**: +48 58 660 7640 **E-mail**: polratok.1@sar.gov.pl
Cooperative Coordination Center (MRSC Świnoujście) ul. Władysława IV 7 72-600 Świnoujście	**Tel./Fax**: +48 91 321 5929 **Tel**: +48 91 321 4917 **E-mail**: polratok.2@sar.gov.pl
Radio channels monitored by MRCC and MRSC	VHF ch. 16, 11- communication system of SAR Service (70 DSC), (74 DSC) - communication system of SAR Service
Maritime Office in Szczecin Pl. Batorego 4 70-207 Szczecin	**EMERGENCY:** **Tel**: +48 91 433 06 97 **Tel**: +48 91 440 3510 **Fax** : +48 91 488 1289 **INQUIRIES**: **Tel**: +48 91 433 9598 **Fax** : +48 91 434 4656 **E-mail:** sekretariat@ums.gov.pl
Maritime Environmental Protection Inspectorate	**Tel**: +48 91 440 3533 **Fax** : +48 91 433 2700 **E-mail**: ios@ums.gov.pl
Maritime Office in Gdynia Ul. Chrzanowskiego 10 81-338 Gdynia	**EMERGENCY:** **Tel** : +48 58 621 1443 **Tel** : +48 58 621 6162

	Fax : +48 58 620 5363 **INQUIRIES**: **Tel**: +48 58 620 6911 **Fax**: +48 58 620 6743 **E-mail**: umgdy@umgdy.gov.pl
Maritime Environmental Protection Inspectorate	**Tel**: +48 58 620 5825, +48 58 620 6911; ext. 320, 321, 325 **Fax**: +48 58 620 5825 **E-mail**: ios@umgdy.gov.pl
Maritime Office in Słupsk ul. H. Sienkiewicza 18 76 -200 Słupsk **Maritime Environmental Protection Inspectorate**	**EMERGENCY:** **Tel**: +48 59 814 6204 **Fax**: +48 59 814 6204 **INQUIRIES:** **Tel:** +48 59 847 4214 **Fax:** +48 59 847 4255 **E-mail**: ios@umsl.gov.pl
Ministry of Infrastructure Shipping Safety Department (office hours) ul. Chałubińskiego 4/6 00-928 Warszawa	**Tel**: + 48 22 630 1639 **Fax** : + 48 22 630 1497 **E-mail**: alaga@mi.gov.pl

For more information on responsibility for counter-pollution measures at sea as well as on oil recovery equipment, please visit the following links:
http://www.sar.gov.pl/SAR/sar.php?lng=uk
http://osc.ums.gov.pl/index.php

1.9 RUSSIA (RU)

National Contact Points

Emergencies (24 hrs)	
Federal State Unitary Enterprise "Baltic Salvage Department" (BSD) 1, Elevatornaya Ploshchadka St. Petersburg, 198096	**Tel:** +7 812-784 02 20 (office hrs), +7 812-784 98 08 **Fax**: +7 812 784 07 55 **E-mal**: Baltic@buksir.ru **Web address**: http://www.buksir.ru
Maritime Rescue Coordination Centre (MRCC St.Petersburg) 10, Gapsal'skaya Street, St. Petersburg, 198035	**Tel:** +7812-327 41 45/718 89 95 (office hrs), +7 812-718 89 45 (Head) +7 812-495 89 95 (24 hrs) **Fax**: +7 812-327 41 46 **Telex**: 121512 RCC RU **Inmarsat-C**: 492 509 012 **Inmarsat-Mini-M**: 761 319 893 **E-mail**: mrcc@mail.pasp.ru
Maritime Rescue Coordination Centre (MRCC Kaliningrad) 236006 7, Petra Velikogo emb., Kaliningrad, 236006	**Tel**.: +7 4012-57 94 75 (Head) **Tel** +7 4012-53 84 70/53 81 53 (office hrs), **Tel** +7 4012-57 94 74/63 24 43 (24 hrs) **Fax:** +7 4012-64 31 99 **Telex:** 262193 MRCC RU **Inmarsat-Mini-M**: 762 830 387 **E-mail:** mrcc@mapkld.ru
Inquiries	
Federal State Enterprise "State Marine Pollution Control, salvage and Rescue Administration of the Russian Federation" (SMPCSA) 3/6, Petrovka Street, Moscow, 125993	**Tel:** +7 495 626 18 08 (office hrs), +7 495 626 18 07 (office hrs) + 7 495 626 10 52 (24 hrs) **Fax**: +7 495 626 18 09 **E-mal**: mpcsa@smpcsa.ru **Web address**: http://www.gmssr.ru

1. RESPONSIBILITY FOR COUNTER-POLLUTION MEASURES AT SEA AND ON LAND

Federal State Enterprise “State Marine Pollution Control, Salvage and Rescue Administration of the Russian Federation” (SMPCSA) together with Salvage Department/Division for salvage, Rescue, Shi-raising and Underwater Technical Operation (St. Petersburg, Murmansk, Korsakov, Vladivostok, Astrakhan, Novorossiysk) forms a functional subsystem of forces and facilities being a part of unified State Structure of oil response and recovery in case of emergency situations.

SMPCSA is a federal state institution subordinate to the Federal Agency of Maritime and River Transport which in its turn is subordinate to the Ministry of Transport of the Russian Federation.

SMPCSA is an organization responsible for practical fulfillment of the Russian Federation obligation in accordance with conventions for search and rescue of distressed people at the sea, rending assistance for the distressed vessels, oil spill preparedness and response, as well as several intergovernmental bilateral agreements in the field of oil spill combating.

Federal State Unitary Enterprise “Baltic Salvage Department” (BSD) is an official representative of SMPCSA in the Baltic Sea.

1.1. ORGANIZATION

The levels of oil spill contingency planning determines in accordance with rules and regulations assigned by the legislation of the Russian Federation:

The levels of national oil spill response are identified by:

- Federal Plan;
- Regional (basin) Plan;
- Objective Plans.

Depending on the volume of spilled oil for the Objective Plans at sea the following emergency situations of the proper categories can be identified:

- Local – the initial volume of oil spill till 500 tons (determines by the specially appointed Federal Authority of the executive power in the sphere of environment protection) ;
- Regional – the volume of oil spill from 500 till 5 000 tons;
- Federal - the volume of oil spill over 5 000 tons.

(1) BSD is responsible for oil spill combating in the open sea.

(i) The local authorities are responsible for oil pollution combating on the beaches and on the coastlines.

(ii) The Harbor Master is responsible for oil pollution combating in the port and harbour areas.

(iv) The oil and/or chemical spill combating action is initiated by SMPCSA or by polluter or by operator of the port area in which the oil/chemical pollutant has been found – after giving notification.

1.2. GENERAL COMBATTING POLLUTION POLICY

For combating oil/chemical pollution at the sea the Russian combating pollution policy is based on two different approaches. The first, as priority, is to collect oil mechanically by any available skimmers and/or absorbents. The second is to use dispersants or bioproducts which is strongly limited and requires written permission from the Federal Supervisory Natural Resources Management Service, the Federal Agency for Fishery and the Federal Service for the Oversight of Consumer Protection and Welfare.

1.3. PREPAREDNESS

BSD provides oil pollution preparedness at the Russian response zone of the Baltic Sea. General Director of BSD acts as On-Scene Commander during the oil spill response operation at sea.

SMPCSA, if its own forces are not sufficient and pollution seems to be sever, can request the international assistance throughout the Ministry of Transport of the Russian Federation.

The combating operations are performed accordingly to the Regional Oil Spill Contingency Plan in the Russian Area of responsibility at the Baltic Sea which was approved and implemented in 2005.

EQUIPMENT	TOTAL	APPROXIMATE DAILY EATE
1. Oil recovery vessels		
1.1. m/v YASNYY – supply vessel, 7200 hp, Length 82 m, Capacities 300 m^3, 70 m^3/h	1	13000 USD/UNIT
1.2. t TOPAS - tug/salvage, 4000 hp, Length 59 m, Capacities 120 m3, Bollard Pull 35 t, Brake holding on 1-st layer 40 t	1	7000 USD/UNIT
1.3. Rescue boom speed boats of “Harding 1500” type, Length 15 m	3	2000 USD/UNIT
1.4. “NMS” – special vessel for , Length 17,7 m	3	1000 USD/UNIT
1.5. “KARAT” – oil and garbage recovery vessel, Length 8 m	1	700 USD/UNIT
1.6. “KARAT-2” – boom defence installation boat, Length 7,5 m	1	700 USD/UNIT
1.7. “KIT”, “Pribreshny” – environmental protection vessels, Legnth 33.6 m	2	2500 USD/UNIT
1.8. «SPRUT-2» - non-propelled craft for salvage operation, Length 28.6 m	1	1800 USD/UNIT
1.9. “Vyborg” – tug, Length 32 m		3000 USD/UNIT
1.10. “PORTOVYY-1” – tug, Length 21,5 m		2200 USD/UNIT
2. Sea-BOOM (metres)		
2.1. Ro-BOOM 1500 (YASNIY – 600 m)	2000	12 USD/UNIT
2.2. LAMOR SIB 350	400	25 USD/UNIT
2.3. RO-BOOM 2000	500	12 USD/UNIT
2.4. BPP - 1100	5700	6 USD/UNIT
2.5. BPP – 830	3100	6 USD/UNIT
3. Mechanical Recovery		
3.1. LAMOR MINIMAX 100	3	540 USD/UNIT
3.2. LAMOR MINIMAX 30	2	300 USD/UNIT
3.3. LAMOR ICE EATER	2	500 USD/UNIT
3.4. LAMOR MINIMAX 20	4	8003USD/UNIT
3.5. LAMOR MINIMAX 10	4	100 USD/UNIT
3.6. DESMI-250	3	100 USD/UNIT
3.7. DESMI MINIMAX	3	50 USD/UNIT
4. Cargo Pump for Oil		
4.1. FRAMO - 1	2	700 USD/UNIT
4.2. FLOATING FLEX. CONTAINER 50 m^3	1	100 USD/UNIT
15 m^3	2	50 USD/UNIT

1.10 SWEDEN (SE)

National Contact Points

Emergencies (24 hrs)	
Swedish Coast Guard Headquarters Stumholmen SE-371 23 Karlskrona	**Tel**: + 46 455 35 35 35 **Fax**: + 46 455 812 75
Inquiries (office hrs)	
Swedish Coast Guard Headquarters Stumholmen SE-371 23 Karlskrona	**Tel**: + 46 455 35 34 00 **Fax**: + 46 455 105 21

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following links: http://www.coastguard.se/ra/helcom/responsibility.htm and http://www.coastguard.se/ra/helcom/equipment.htm.

2. RESPONSE REGIONS

According to Regulation 4, Annex VII of the Helsinki Convention and HELCOM Recommendation 2/7 concerning the Delimitation of Response Regions for Combatting Marine Pollution, the Contracting Parties are obliged, inter alia, to agree bilaterally or multilaterally on those regions of the Baltic Sea in which they will conduct aerial surveillance activities and take action for combatting and salvage activities. As a principle the response regions should coincide with the boundaries of the Exclusive Economic Zones, where applicable.

The present situation is shown in the table below.

Situation concerning agreements on Response Regions

	Sea Area	Agreement	Note
1.	Sweden - Finland	yes	
2.	Finland - Russia	yes	Finland - former USSR Agreement
3.	Estonia - Russia	no	
4.	Finland - Estonia	yes	Finland - former USSR Agreement
5.	Sweden - Estonia	no	Swedish EEZ is used
6.	Estonia - Latvia	no	
7.	Sweden - Latvia	no	Swedish EEZ is used
8.	Latvia - Lithuania	no	
9.	Sweden - Lithuania	no	Swedish EEZ is used
10.	Lithuania - Russia	no	
11.	Sweden - Russia	yes	
12.	Russia - Poland	no	Boarder Treaty is used
13.	Poland - Sweden	yes	
14.	Poland - Denmark	no	
15.	Poland - Germany	no	Boarder Treaty is used
16.	Germany - Sweden	yes	
17.	Germany - Denmark	yes	
18.	Denmark - Sweden	yes	

3. REPORTING PROCEDURES

3.1 POLLUTION REPORT BALTIC (POLREP BALTIC)

Description of the System

The Pollution Reporting System is for use between combatting authorities to exchange information when pollution of the sea has occurred or when threat of such is present.

The POLREP BALTIC is divided into 3 parts:

Part I or POLWARN (figures 1-5)	POLlution WARNing	gives information or warning of pollution or threat of pollution
Part II or POLINF (figures 40-60)	POLlution INFormation	gives detailed supplementary information
Part III or POLFAC (figures 80-99)	POLlution FACilities	deals with matters related to assistance

The division into three parts is only for identification purposes. For this reason consecutive figures are not used. This enables the addressee or addressees to recognize merely by looking at the figures whether dealing with Part I (1-5), Part II (40-60) or Part III (80-99). This method of division shall in no way exclude the use of all figures in a full report or the separate use of single figures from each part or the use of single figures from different parts mixed in one report.

When Part I is used as a warning it should be transmitted to the combatting authority or authorities which may be affected and to the Secretariat of the Helsinki Commission, and it shall always be transmitted with the traffic priority URGENT. Such a message should always be followed up by a supplementary POLREP or be cancelled.

Part II is used to give detailed information about the incident.

Part III is used for matters related to assistance and a POLREP BALTIC including numbers from Part III can, if deemed necessary, be transmitted with the traffic priority URGENT.

The report should be in English. Each single report should be identifiable. The receiving combatting authority should be in a position to check if all reports of the incident in question have been received. This is done by using a serial number preceded by a national identification, e.g. "DK 1/1".

The national identifiers are the following:

Denmark	DK
Estonia	EE
European Commission	EC / EMSA
Finland	FI
Germany	DE
Latvia	LV
Lithuania	LT
Poland	PL
Russia	RU
Sweden	SE

The number before the stroke indicates the incident to which the report refers, and the number following the stroke indicates the actual number of reports which have been originated on the incident in question.

"DK 1/1" thus indicates the first report of the incident in question.

"DK 1/2" will in accordance with the described system then indicate the second report of the same incident.

The last and final POLREP will show as follows: "DK 1/5 FINAL" which means that this is the fifth and final report concerning the first pollution.

If the pollution caused by the incident splits up in clearly separate patches - in this example two - the wording "DK 1/2 now splitting in DK 2 and 3" should be indicated in the last report from the incident identified by figure 1 preceding the stroke.

The first reports from the two patches originating from the incident first reported will then be numbered DK 2/1 and DK 3/1, and forth running numbering after the stroke could then be used.

In order to keep the receivers of POLREP informed of all the transmitted reports, the combatting authority sending the POLREP must after the serial number include information on the recipients of the earlier transmitted POLREPs, e.g.

DK 2/5 - DK 2/1 for DE and SE
DK 2/2 for DE
DK 2/3 for SE
DK 2/4 for DE and SE

Concerning the figures 5, 60 and 99, it is emphasised that ACKNOWLEDGE made by the combatting authority addressed should be with reference to the serial number in question, e.g. "your DK 2/1".

By answering a POLREP the serial number used by the transmitting combatting authority is to be used as reference in the answer (cf. above).

If the POLREP is used in exercises the text is to be introduced with the word EXERCISE and finished with this word three times. The same procedure should also be used for the following reports which deal with the exercise.

Detailed explanations of the different figures in Part I, II and III of the POLREP BALTIC as well as examples of POLREP BALTIC are given in Chapter 5.2.

3.2 POLLUTION REPORT BALTIC (POLREP BALTIC)

Detailed Information on the System

Chapter 3.1 gives a description of the POLREP BALTIC system in general terms.

This Chapter gives a summarized list on POLREP BALTIC and detailed explanations of the report heading (address, priority, DTG, identification, and serial number). This Chapter further contains POLREP BALTIC sample messages illustrating how the system could be used for different purposes.

Summarized list on POLREP BALTIC

Address from.....
to.....

URGENT (only when POLREP BALTIC is used as POLWARN or POLFAC)

Date Time Group

Identification

Serial Number

PART I (POLWARN)

1. Date and time
2. Position
3. Incident
4. Outflow
5. Acknowledge

PART II (POLINF)

40. Date and time
41. Position
42. Characteristics of pollution
43. Source and cause of pollution
44. Wind direction and speed
45. Current or tide
46. Sea state and visibility
47. Drift of pollution
48. Forecast
49. Identity of observer and ships on scene
50. Action taken
51. Photographs or samples
52. Names of other states informed
53. Report on oiled wildlife
54. Action taken on oiled wildlife
55. Forecast oiling of wildlife
56. Evidence taken from oiled wildlife
57. -
59. Spare
60. Acknowledge

PART III (POLFAC)

80. Date and time
81. Request for assistance
82. Cost
83. Pre-arrangements for the delivery
84. Assistance to where and how
85. Other states requested
86. Change of command

87. Exchange of information
88. Request for wildlife response assistance
89. Pre-arrangement for wildlife response assistance
90. To where wildlife assistance should be rendered
91. -
98. Spare
99. Acknowledge

HEADING	**REMARKS**
URGENT	Traffic Priority to be used when POLREP BALTIC is used as POLWARN or POLFAC.
DTG (date time group)	Day and time for drafting of the telex (DTG). Always 6 figures. Can be followed by month indication. The time should be given in UTC (Universal Time Coordinator).
POLREP BALTIC	This is the identification of the report. "POL…" indicates that the report might deal with all aspects of pollution (oil and other harmful substances). "…REP" indicates that this is a report on a pollution incident. It can contain up to 3 main parts: PART I (POLWARN) is an initial notice giving information or warning of pollution or threat of pollution. This part of the report is numbered from 1-5. PART II (POLINF) is a detailed supplementary report to Part I. This part of the report is numbered from 40-60. PART III (POLFAC) is related to assistance. This part of the report is numbered from 80-99.

"BALTIC" is to identify that the reporting is within the context of the Helsinki Convention.

Part I, II and III can be transmitted in one report or in separate reports. Furthermore, single figures from each part can be transmitted separately or combined with figures from the two other parts. Figures without additional text must not be used.

POLREPs containing "ACKNOWLEDGE" figures (5, 60 or 99) should be acknowledged as soon as possible by the combatting authority addressed.

The reporting combatting authority shall indicate by telefax when no more operational communication on that particular incident can be expected.

NATIONAL IDENTIFIER AND SERIAL NUMBER

Each single report should be possible to identify and the receiving agency should be in a position to check whether all reports of the incidents in question have been received. This is done by using a national identifier (cf. Chapter 5.1) followed by a stroke system where the figure before the stroke indicates the incident to which the report refers, and the figure following the stroke indicates the actual number of reports which have been originated on the incident in question.

"DK 1/1" thus indicates the first report from Denmark of the incident in question within the Helsinki Convention context.

"DK 1/2" will in accordance with the described system then indicate the second report from the same incident.

If the pollution caused by the incident splits up in clearly defined patches - in this example two - the wording "DK 1 now splitting into DK 2 and 3" should be indicated in the last report on the incident identified by figure 1 preceding the stroke.

The first reports on the two patches originating from the incident first reported will then be numbered "DK 2/1" and "DK 3/1" and consecutive numbers after the stroke could then be used.

ITEM NUMBERS

1.	DATE AND TIME	The day of the month as well as the time of the day when the incident took place or if the cause of the pollution is not known, the time of the observation should be stated with 6 figures. Time should be stated in UTC, for example 091900 (i.e. the 9th of the relevant month at 1900 UTC)
2.	POSITION	The main position of the incident in latitude and longitude in degrees and minutes or by bearing and distance from a location known to the addressee.
3.	INCIDENT	The nature of the incident should be stated here, such as BLOWOUT, TANKER GROUNDING, TANKER COLLISION, OIL SLICK, etc.
4.	OUTFLOW	The nature of the pollution such as CRUDE OIL, CHLORINE, DINITROL, PHENOL, etc. as well as the total quantity in tonnes of the outflow or/and the flow rate as well as a risk for further outflow. If there is no pollution, but a pollution threat, the words NOT YET followed by the substance, e.g. "NOT YET FUEL OIL" should be stated.
5.	ACKNOWLEDGE	When this figure is used the POLREP BALTIC should be acknowledged as soon as possible by the combatting authority addressed e.g. "YOUR RU 1/3 ACKNOWLEDGED".

ITEM NUMBERS		**REMARKS**
40.	DATE AND TIME	No. 40 relates to the situation described in figures 41 to 60 if it varies from figure 1.
41.	POSITION AND/OR EXTENT OF POLLUTION ON/ ABOVE/IN THE SEA	The main position of the pollution in latitude and longitude in degrees and minutes or by bearing and distance from a location known to the receiver if other than indicated in figure 2. Estimated amount of pollution (e.g. size of polluted areas, number of tonnes of oil spilled, number of containers, drums etc. lost, if other than indicated in figure 4).

		Indicates length and width of slick given in nautical miles and in tenth of nautical miles if not indicated in figure 2.
42.	CHARACTERISTICS OF POLLUTION	Gives type of pollution, e.g. type of oil with viscosity and pour point, packaged or bulk chemicals, sewage. For chemicals give proper name or UN-number, if known. For all, give also appearance, e.g. liquid, floating solid, liquid oil, semi-liquid sludge, tarry lumps, weathered oil, discolouration of sea, visible vapour. Any markings on drums, containers, etc. should be given.
43.	SOURCE AND CAUSE OF POLLUTION	E.g. from vessel or other undertaking. If from vessel, say whether as a result of deliberate discharge or casualty. If the latter, give brief description. Where possible, give name, type, size, call sign, nationality and port of registration of polluting vessel. If vessel is proceeding on its way, give course, speed and destination.
44.	WIND DIRECTION AND SPEED	Indicates wind direction and speed in degrees and m/sec. The direction always indicates from where the wind is blowing.
45.	CURRENT DIRECTION AND SPEED	Indicates current direction and speed in degrees and knots and tenths of knots. The direction always indicates the direction in which the current is flowing.
46.	SEA STATE AND VISIBILITY	Sea state indicated as wave height in meters. Visibility in nautical miles.
47.	DRIFT OF POLLUTION	Indicates drift course and speed of pollution in degrees and knots and tenths of knots. In case of air pollution (gas cloud) drift speed is indicated in m/sec.
48.	FORECAST OF LIKELY EFFECT OF POLLUTION AND ZONES AFFECTED	The forecast could be given as e.g. estimated time for the pollution to hit beaches or results of mathematical drift models.
49.	IDENTITY OF OBSERVER/ REPORTER	Indicates who has reported the incident. If a ship, name, home port, flag and call sign must be given.

	IDENTITY OF SHIPS ON SCENE	Ships on scene can also be indicated under this item by name, home port, flag and call sign, especially if the polluter cannot be identified and the spill is considered to be of recent origin.
50.	ACTION TAKEN	Any action taken for the disposal of the pollution .
51.	PHOTOGRAPHS TAKEN	Indicates if photographs or samples from the pollution have been taken. Telefax number of the sampling authority should be given.
52.	NAMES OF OTHER STATES & ORGANIZATIONS INFORMED	
53.	REPORT ON OILED WILDLIFE	Indicates: - date and time of report - amount and state of oiled wildlife - oiled species - position of observation and if at sea and/or on shore - the source of the pollution (if possible)
54.	ACTION TAKEN ON OILED WILDLIFE	Any action taken for collection and/or treatment of the oiled wildlife
55.	FORECAST OILING OF WILDLIFE	Forecast should be given of estimated time of the pollution arriving in wildlife sensitive area(s)
56.	EVIDENCE TAKEN FROM OILED WILDLIFE	Have samples of e.g. oiled feathers been taken?
57-59		SPARE FOR ANY OTHER RELEVANT INFORMATION (e.g. results of sample photographic analysis, results of inspections by surveyors, statements of ship´s personnel, etc).
60.	ACKNOWLEDGE	When this figure is used, the telefax should be acknowledged as soon as possible by the competent national authority.

ITEM NUMBERS	REMARKS
80. DATE AND TIME	Number 80 is related to the situation described below if it varies from figures 1 and/or 40.
81. REQUEST FOR ASSISTANCE	Type and amount of assistance required in form of: - specified equipment - specified equipmen with trained personnel - complete strike teams - personnel with special expertise with indication of requested country
82. COST	Requirements for cost information of requested assistance to requesting country.
83. PRE-ARRANGE-MENTS FOR THE DELIVERY OF ASSISTANCE	Information concerning customs clearance,access to territorial waters, etc. in the requesting country.
84. TO WHERE ASSISTANCE SHOULD BE RENDERED AND HOW	Information concerning the delivery of the assistance, e.g. rendezvous at sea with information of frequencies to be used, call sign and name of Supreme On Scene Commander of the requesting country or land-based authorities with telephone numbers, telefax numbers and contact persons.
85. NAMES OF OTHER STATES AND ORGANISATIONS	Only to be filled in if not covered by figure 81, e.g. if further assistance is later needed by other States.
86. CHANGE OF COMMAND	When a substantial part of an oil pollution or serious threat of an oil pollution moves or has moved into the zone of another Contracting Party, the country which has exercised the supreme command of the operation may request the other country to take over the supreme command.
87. EXCHANGE OF INFORMATION	When a mutual agreement has been reached between two parties on a change of supreme command, the country transferring the supreme command should give a report on all relevant information pertaining to the operation to the country taking over the command.

88.	REQUEST FOR WILDLIFE RESPONSE ASSISTANCE	Type and amount of assistance required - Specified equipment - Trained personnel - Complete strike teams - Use of a rehabilitation centre abroad - Cost related to the assistance
89.	PRE-ARRANGEMENT FOR WILDLIFE RESPONSE ASSISTANCE	- Custom clearance if animals need to be transported abroad - Custom clearance of mobilised equipment and units
90.	TO WHERE WILDLIFE ASSISTANCE SHOULD BE RENDERED	- Information concerning the delivery of the assistance, e.g. delivery address - Contact details of the wildlife response coordination unit
91 - 98		SPARE FOR ANY OTHER RELEVANT REQUIREMENTS OR INSTRUCTIONS
99.	ACKNOWLEDGE	When this figure is used the telefax should be acknowledged as soon as possible by the competent national authority.

POLREP BALTIC Telefax Sample Message

Part 1 Used as a Warning of Pollution

Heading and Item Numbers	POLREP BALTIC Telefax Message
Address	FROM DENMARK TO SWEDEN HELSINKI COMMISSION
Traffic priority	URGENT
Date time group (UTC)	030730

Message identification	POLREP BALTIC
National identification and serial number	DK 1/1
1. Date and time (UTC)	1. 030700
2. Position	2. 5538N1243E
3. Incident	3. TANKER GROUNDING
4. Outflow	4. NOT YET CRUDE OIL
5. Acknowledge	5. ACKNOWLEDGE

POLREP BALTIC Telefax Sample Message

Full Report Using Part 1, 2 and 3

Heading and Item Numbers	POLREP BALTIC Telefax Message
Address	FROM DENMARK TO SWEDEN GERMANY
Traffic priority	URGENT
Date time group (UTC)	030915
Message identification	POLREP BALTIC
National identification and serial number	DK 1/2 - DK 1/1 FOR SE
1. Date and time (UTC)	1. 030900
2. Position	2. 5538N1243E
3. Incident	3. TANKER GROUNDING
4. Outflow	4. CRUDE OIL, 800 TONS ESCAPED
41. Position and/or extent of pollution on/above/in the sea	41. OIL SLICK EXTENDING 1 MILE TO THE SOUTH, WIDTH 0.3 MILES

42.	Characteristics of pollution	42. VENEZUELA CRUDE. VISCOSITY 2983 CST AT 38C. HIGHLY VISCOUS
43.	Source and cause of pollution	43. DK TANKER ESSO BALTICA OF COPENHAGEN, 5000 GRT, CALL SIGN OVQZ. THREE WING TANKS DAMAGED
44.	Wind direction and speed	44. 000 - 10
45.	Current direction and speed	45. 180 - 0.2
46.	Sea state and visibility	46. 0.5 - 10
47.	Drift of pollution	47. 180 - 0.5
48.	Forecast of likely effect of pollution on/above/in the sea	48. COULD REACH FALSTERBO WITHIN HOURS
49.	Identity of observer/reporter Identity of ships on scene	49. RE. 43 ABOVE
50.	Action taken	50. TWO DK STRIKE TEAMS WITH HIGH OIL RECOVERY CAPABILITY EN ROUTE. ETA SPILL SITE 031000.
51.	Photographs taken	51. OIL SAMPLES TAKEN. TELEX 64471 SOK DK
52.	Names of other states & organizations informed	52. SE AND HELCOM
53.	Spare	53. NAVIGATIONAL WARNING ISSUED AS LYNGBY RADIO NAV. WARN. NO 57
81.	Request for assistance	81. FOR SWEDEN: REQUEST ONE A-CLASS (M1 SYSTEM) AND ONE B-CLASS VESSEL (M3 SYSTEM)

	FOR DE: REQUEST ONE STRIKE TEAM WITH 500 M HIGH SEA BOOM AND HIGH CAPACITY SKIMMER
82. Cost	82. REQUEST INFORMATION ON COST RATE FOR ASSISTANCE UNDER ITEM 81
83. Pre-arrangements for the delivery of assistance	83. FORMALITIES REGARDING BORDER PASSAGE WILL BE CLEARED WHEN ITEM 81/3 CONFIRMED
84. To where assistance should be rendered and how	84. SITE OF GROUNDING. CONTACT GUNNAR THORSON OF VHF CHANNEL 16. CALL SIGN OWPB. SOSC KNUD HANSEN ON BOARD GUNNAR THORSON
99. Acknowledge	99. ACKNOWLEDGE

POLREP BALTIC Telefax Sample Message

Part 3 Used as Reply to a Request for Assistance

Heading and Item Numbers

Address	FROM SWEDEN TO DENMARK
Traffic priority	URGENT
Date time group (UTC)	031115
Message identification	POLREP BALTIC
National identification and serial number	YOUR DK 1/2 REFERS
80. Date and time (UTC)	80. 031100

81. Request for assistance	81. TV 02 AND TV 048 WITH OIL BOOMS AND SKIMMERS ARE AVAILABLE
82. Cost	82. TOTAL COST FOR TV 02 AND TV 048 WILL BE APPROXIMATELY 6600 SEK PR. HOUR ON SITE
84. To where assistance should be rendered and how	84. TV 048 ETA SPILL AREA 031200 TV 02 ETA SPILL AREA 031400
99. Acknowledge	99. ACKNOWLEDGE

POLREP BALTIC Telefax Sample Message

Part 1 Used as Exercise Message

Heading and Item Numbers	POLREP BALTIC Telefax Message
Address	FROM FINLAND TO RUSSIA SWEDEN HELSINKI COMMISSION
Traffic priority	URGENT
Date time group (UTC)	060300
Exercise identification	EXERCISE
Message identification	POLREP BALTIC
National identification and serial number	FI 1/1
1. Date and time (UTC)	1. 060235
2. Position	2. 5959N2533E
3. Incident	3. CARGO SHIP COLLISION

4. Outflow	4. NOT YET HEAVY FUEL OIL. APPROXIMATELY 400 TONS ON BOARD DAMAGED VESSEL
5. Acknowledge	5. ACKNOWLEDGE
Exercise identification	EXERCISE EXERCISE EXERCISE

3.3 INTERNATIONAL EARLY WARNING REPORTING SYSTEM FOR POLLUTION CAUSED BY ALGAL BLOOMS (ALGPOLREP)

ALGPOLREP

A reporting format to cover "natural" pollution incidents in the form of algal blooms has been developed by the Paris Commission's Working Group on Nutrients and adopted by the Paris Commission. At their eighth meeting (Brussels, September 1996) the Contracting Parties to the Bonn Agreement agreed to inform the Oslo and Paris Commission (OSPAR) that the said reporting format, after having been temporarily adopted, would remain in use and at their disposal. The reporting format is approved for use in the Baltic Sea Area by the 15th meeting of the Combatting Committee.

Summarized List

Address from to
Date time group
Identification ALGPOLREP HELCOM
Serial Number

PART I: ALGPOLREP (1-6)

1 Date and time of observation
2 Position
3 Algal bloom
4 Type of algae
5 Flow direction and rate
6 Acknowledge

PART II: ALGPOLINF (40-70)

40 Date and time
41 Area covered, patchy/homogenous
42 Type/colour of algal bloom
Colour code: 1 = colourless, 2 = yellow, 3 = orange,
4 = red, 5 = green, 6 = blue, 7 = brown,
8 = unknown (observation at night)
43 Coastal/open sea area
44 Wind direction and speed
45 Current (direction and speed); tide
46 Sea state and visibility
47 Drift of algal bloom and velocity
48 Forecast of effects: zones affected, arrival on beaches, fish farms
49 Identity of observer (ships, aircraft involved)
50 Action taken
51 Photographs and/or samples taken
52 Detection: remote sensing (IR, SLAR, UV) and/or visual
53 Names of other states informed
54 Algal concentration
55 Salinity
56 Temperature
57 Species
58 Toxicity
59 Foaming/colouring
60-
69 Details of monitoring
70 Acknowledge

PART III: ALGPOLFAC (80-99)

80 Date and time
81 Request for assistance (equipment, experts)
82 Cost
83 Pre-arrangements for the delivery
84 Assistance to where and how
85 Other states requested
86 Change of command (when bloom has moved)
87 Exchange of information
88-
98 Spare (any other requirements or instructions)
99 Acknowledge

In compliance with HELCOM Recommendation 10/1 ALGPOLREP is forwarded to National Contact Points which transmit the report to the relevant national authorities or institutes. The National Contact Points are not responsible for the entries under the different codings for the "natural" pollution incidents.

4. REQUESTING AND PROVIDING ASSISTANCE

Requesting and providing assistance for combatting spillages of oil or other harmful substances at sea according to Annex VII, Regulation 8 of the Helsinki Convention)

4.1 REQUESTING PARTY

Request for assistance from a Contracting Party (requesting Party) in case of a major spillage of oil or other harmful substance at sea as well as resulting oiled wildlife in order to perform combatting operations and/or oiled wildlife response shall be made by the competent authority of that Party and addressed to the competent authority of another Contracting Party (assisting Party).

A request by telephone shall always be followed by a written confirmation by a competent authority of the requesting Party.

Requested assistance will be subject to the responsibility of the requesting Party. Personnel from the assisting Party is assigned to the competent authority of the requesting Party. Such personnel may only be transferred to other authorities or organizations of the requesting Party with the approval of the assisting Party.

The requesting Party is responsible for the necessary domestic arrangements for the border passage and the housing of the assisting resources as well as the necessary arrangements for collected oil, rescued or dead oiled wildlife, and provision of maintenance facilities.

Request for assistance can consist of:
- specified equipment only;
- specified equipment with trained personnel;
- complete strike teams;
- personnel with special expertise;
- aerial surveillance.

Strike teams referred to above consist of:
- combatting ships and work boats and equipment for
    - communication
    - personal safety (protective suits, breathing apparatus, etc.)
    - combatting marine pollution
    - storage of limited quantities of recovered oil, etc., on board (if tank capacity is available);

- trained crews and personnel for handling the equipment;

- National On-Scene Commander (NOSC) with necessary staff independently able to conduct the work of the strike teams according to instructions from the appointed Supreme On-Scene Commander (SOSC).

4.2 ASSISTING PARTY

The assisting Party shall be prepared to give information on the financial consequences connected with the requested assistance.

The assisting Party shall use its best endeavours to bring about the requested assistance and to decide to which extent the request can be complied with.

The assisting Party shall be prepared to appoint liaison officers to the staff of the Operational Control of the requesting Party in order to secure necessary knowledge of rendered national resources.

4.3 DISPATCHING OF RESOURCES

Both parties should make a preliminary agreement concerning the proper dispatching of the resources provided as well as concerning a survey and assessment of consumed stocks, including damaged or contaminated equipment (cf. Chapter 6 of Part I).

4.4 TERMINATION OF ASSISTANCE

If the circumstances so demand, the assisting Party can fully or partly terminate it=s assistance. Information on the termination shall be communicated to the competent authority of the requesting Party.

5. OPERATIONAL CO-OPERATION

5.1 GENERAL PRINCIPLES

- In accordance with Regulation 1 of Annex VII of the Helsinki Convention, the Contracting Parties undertake to maintain ability to respond to pollution incidents threatening the marine environment of the Baltic Sea area. This ability shall include adequate equipment, ships and manpower prepared for operations in coastal waters as well as on the high sea. The Contracting Parties shall, subject to their capabilities and availability of relevant resources, co-operate in responding to pollution incidents when the severity of such incidents so justify.

- According to Regulation 4 of Annex VII of the Helsinki Convention the Contracting Parties shall as soon as possible agree bilaterally or multilaterally on those regions of the Baltic Sea Area in which they shall conduct surveillance activities and take action to respond whenever a significant pollution incident has occurred or is likely to occur.

- In accordance with Regulation 7 of Annex VII of the Helsinki Convention the Contracting Party shall, when a pollution incident occurs in its response region, make the necessary assessments of the situation and take adequate response action in order to avoid or minimize subsequent pollution effects. When such a spillage is likely to drift into a response region of another Contracting Party, that Party shall without delay be informed of the situation and the actions that have been taken.

- A Contracting Party is entitled according to Regulation 8 of Annex VII of the Helsinki Convention to call for assistance by other Contracting Parties when responding to a pollution incident at sea. Contracting Parties shall use their best endeavours to bring such assistance. They shall facilitate transport and movements of ships, aircraft, personnel, cargoes, materials and equipment, which are engaged in responding to a pollution incident, into, through and out of their territories.

5.2 OPERATION MANAGEMENT

Operation management for a marine pollution emergency consists of four elements; control, command, communication and intelligence. The Contracting Party in charge of a joint operation, the Lead Country, has operational control and command of it.

Especially the Contracting Parties involved in a joint operation, shall communicate in all relevant levels of cooperation. The reporting procedures described in previous Chapter 3, the guidelines in Chapter 4 for requesting and providing assistance, and the operational communication detailed later in sub-paragraph 5.4 formulate the ways and means of such communication.

Intelligence includes reconnaissance and forecasting. The aerial surveillance, which is featured in Chapter 7 is a tool for co-operation on reconnaissance of pollution. HELCOM Recommendation 12/6 and the Guidelines on development and use of oil drifting forecasting are applicable also to operational co-operation.

5.3 COMMAND STRUCTURE

The general principles for the command structure for joint combatting operations are given in HELCOM Recommendation 2/5 and the diagram showing these principles is contained in Table 1 to this Chapter.

The Contracting Party who has a multinational combatting force operating within its response region shall, unless otherwise agreed, be in charge of the joint operation (**Lead Country**).

A **Competent Authority** of a country is the nationally responsible authority, that is empowered to request and give international assistance (cf. Chapter 1). Competent Authorities of the Assisting Countries provide agreed assistance, such as **Strike Teams** and materials, to the use of the **Operational Control** (normally ashore) of the Lead Country.

The Competent Authority of the Lead Country has the overall control of a joint operation and all pollution response measures for the same incident. Nationally it is assisted by the respective **Co-operative National Authorities**, which deliver necessary resources to the Operational Control.

The Operational Control is the control and command function that is undertaken by the appointed national authority of a Lead Country in charge of a joint combatting operation relating to the disposition and use of personnel and equipment placed at its disposal. The Operational Control plans, orders and co-ordinates all combatting measures at sea and on shore for an incident and takes care of communication, command, control, intelligence, forecasts and other joint arrangements in connection herewith.

Operational Control is an operative body having the responsibility for and supervision over the staff, facilities, communications and equipment provided in the combatting operation (Table 1).

The person in charge of the overall operational control is the **Response Commander (RC)**. He may be aided by the **liaison officers** from assisting countries and the **representatives** of co-operative national and regional authorities acting as an **advisory body** for him.

Under the Operational Control and command of RC the **Tactical Command On-Scene** (normally at sea in a joint operation) is laid upon a designated **Supreme On-Scene Commander (SOSC)** from the Lead Country. The contingents of Strike Teams of assisting countries and of the Lead Country operate under the command of a **National On-Scene**

Commander (NOSC) from each country. The NOSC is operating under the command of the SOSC.

Leaders of special joint functions and separate units may be directly under the RC or the SOSC. For instance flight operations for reconnaissance and/or transport can be coordinated by the operational control and there be controlled and commanded by a special **Flight Coordinator**.

With the aim of further facilitating the operational co-operation in joint combatting operations, the following guidelines have been agreed upon:

Operational Guidelines

The Lead Country shall, inter alia:
- give administrative, operational and logistic support to assisting foreign units;
- give clearly defined tasks to all units; organize the practical co-operation between units from different countries;
- keep all units well-informed of the overall situation; and
- keep a firm contact with the command organizations of the assisting countries in order to secure that assisting foreign units can be transferred to national command, if so necessitated.

Operationally self-contained foreign units should, to the largest extent, be given separate tasks within defined geographical areas. The execution of the task will be carried out under the command of the appropriate NOSC who will be in close radio contact with the SOSC from the Lead Country.

When needed, units from different strike teams can temporarily be put at the disposal and command of another NOSC.

If the assistance is rendered in the form of equipment or units not operationally self-contained, it is the responsibility of the Lead Country=s operational control or tactical command to integrate the equipment or units in the combatting operation.

If the main body of the pollution in question passes the border line of a neighbouring country´s response region, the operational control and command (Lead Country) will normally be transferred to the country whose response region is thus affected by the main body of the pollution.

The timing of the shift of operational control and command should be negotiated between the two countries in question, taking due regard to the overall picture and any possible trends in its development.

The countries in question will further have to settle the number of units and the amount of equipment that could be placed at the disposal of the new Lead Country and how the combatting operation should be continued.

The contingency organizations in the Contracting Parties shall keep each others informed about the pollution incidents, extent and area together, with information on the actions taken and their efficiency.

In connection with operations in border areas, the neighbouring countries should be consulted with respect to priority and employment of resources.

As the use of chemical agents can influence the interests of neighbouring countries, the employment of such agents should be taken with a due regard to the neighbouring countries´ attitude to their use. Due account should also be given to Regulation 7 of Annex VII of the Helsinki Convention stipulating that mechanical means are the preferred response measures and that chemical agents may only be used in exceptional cases, after authorization has been granted in each individual case. Furthermore, HELCOM Recommendation 22/2 concerning ARestricted Use of Chemical Agents and Other Non-mechanical Means in Oil Combatting Operations in the Baltic Sea Area@ should be taken into account.

It is anticipated that the Lead Country will initiate surveillance of the spill within its own response region and communicate the results from this surveillance activity to other Contracting Parties bordering the Lead Country=s response region. If a spill spreads into two or more response regions, the contingency organizations of the Contracting Parties, whose response regions are affected by the spillage, should agree on a co-ordinated surveillance of the spill area in order not to duplicate the surveillance efforts.

Guidelines for liaison

In combatting situations where two or more Contracting Parties are or could be involved, the Contracting Parties in question shall be entitled to send two liaison officers as a maximum to the respective national centres responsible for combatting operations.

The exchange of the liaison officers is independent of whether the combatting operation is carried out on a purely national basis, by means of rendered equipment or by strike teams from other Contracting Parties.

The liaison officers shall be given access to meetings and conferences relevant to the combatting operation, unless only internal national issues are considered.

The liaison officers shall be given the opportunity to give advice and statements during meetings in matters concerning the actual combatting and the disposal of resources, etc., when the matter in question concerns their own country’s territory.

The liaison officers are placed under the same obligations of discretion as imposed on the central=s own national staff but are not limited as to the substance to be reported to their own national authorities.

The liaison officers are under no administrative obligations from the host country except those established by the host country for the functioning of the central itself. The liaison officers will thus have to arrange for their own accommodation, meals, etc. The liaison officer should be given access to telephone and telefax to a reasonable extent. The functions of the liaison officers should be two-way so that their home country should be able to canalize its opinions and wishes through the liaison officers. Especially in cases involving joint operations or rendered equipment, this two-way function will be of great importance.

In relation to execution of surveillance activities with fixed wing aircraft and helicopters, the liaison officers should co-ordinate the surveillance activities with their national authorities in order to avoid costly duplication.

If two countries affected by the same pollution should choose not to exchange liaison officers, they should as a rule exchange daily situation reports.

SOSC and NOSC may exchange liaisons in accordance to needs.

5.4 COMMUNICATION

5.4.1 General

The reporting procedures detailed in Chapter 3 apply to normal communication between the competent national authorities responsible for receiving and dispatching pollution reports and for mutual assistance, information and cooperation in joint combatting operations. They apply also to establishing direct contacts between the relevant national combatting authorities.

The outline scheme for radio communications between operative bodies in joint combatting operations in the Baltic Sea Area is given in sub-chapter 5.4.3 and Table 3 to this Chapter. Besides that and formal reporting, a lot of communication is needed to produce information and support, which the situation management requires. In order to optimize communication, a scheme for all of it is useful, too.

It should be noted that the working language between the SOSC and NOSCs from other countries than that of the SOSC should be English, if not otherwise agreed between the on-scene commanders/coordinators. The working language for communications between NOSCs from different countries is established according to the same guidelines.

An example of a scheme for all communications for a joint combatting operation is shown in Table 2 to this Chapter. A scheme of radio communications for joint combatting operations is shown in Table 3 to this Chapter. In the following some additional information is given as to the communication between the different levels in the communication scheme.

5.4.2 External (off-site) Communications

International communication between Contracting Parties

Formal messages warning and informing on an incident, requesting and rendering assistance and acknowledging such messages shall be signed by an appointed officer on behalf of the Competent National Authority. Such POLREP messages should be done preferably by telefax and sent via the National Operational Contact Point of each Contracting Party.

The authenticity of any official message should be possible to check preliminary on the basis of the call number of a sending device printed on the report and to be found on the list of contact numbers in Chapter 1. When further checking is needed a return call to the official contact number is recommended.

Urgent official or informal contacts may be made in some other convenient way, like by telephone calls, too. Any matter of importance for joint efforts or for one=s interest like requests, decisions, plans, purposes, reasons and available resources and possibilities should be confirmed as soon as possible by formal messages as said above.

Communication between Competent Authorities of Contracting Parties and the Operational Control

The Competent Authority of the Lead Country and the Competent Authority of a assisting country may communicate with the Operational Control by using all convenient ways of communication available for the purpose. All important matters for assistance shall be confirmed by the Competent Authorities of the respective Contracting Parties as said under the previous heading.

The assisting country=s liaison officer, if any, may take care of communication between his authority and the Operational Control. Otherwise it is the duty of the Operational Control to deliver necessary information at minimum daily.

Communication between an Assisting Country and its Strike Teams

An Assisting Country may communicate with its NOSC and Strike Teams via its liaison and the Operational Control or directly when not out of the reach of applicable communication devices. Sea-going units may be reached by radio via MF, VHF or HF coast stations or by mobile telephone (NMT or GSM) or by satellite telephone.

Flight units and other land-based teams may be attained by telephone. A plane, when airborne, may be attained directly only within the reach of its communication devices and indirectly through the Operational Control. In case of an emergency an airborne aircraft may be attained through the **Air Traffic Service**, too.

5.4.3 Operative Communications (Table 3)

Communication between the Operational Control, the SOSC and Flight Operations (1st Level: ashore to scene)

The operational control is exercised normally by the country within whose response region the operation takes place (Lead Country) and its physical location will normally be ashore.

It is the responsibility of the Lead Country to establish and maintain the communication between the Operational Control, SOSC and Flight Operations.

Depending on the facilities and internal organization within the Lead Country, the communication could be established either directly from the Operational Control to the SOSC via radio telephone, radio telegraphy, mobile telephone or mobile telecopyprinter, or via a coast radio station using telefax or telephone between the Operational Control and coast radio station and maritex, radio telephone or radio telegraphy between the coast radio station and the SOSC.

The Operational Control (and maybe a special **Flight Coordinator**) communicate with airplanes and helicopters via the aviation frequencies (VHF 118-136 MHZ), which the nearest **Flight Information Region** will order to be used for the purposes of the operation. Aviation frequencies may also be used in communication between aircraft and SOSC, who has to have an aviation radio for that.

Maritime patrol planes and rescue helicopters are normally equipped with maritime VHF radios for direct communication between them and vessels, which is beneficial for transport and near reconnaissance services. Remote sensing results gained by a surveillance flight may be transferred from a plane immediately to the Operational Control and to SOSC by radiotelephone or by a possible special image transfer system. Later after a flight reconnaissance, data can be sent by mobile telecopy or from computer to computer by radio or mobile telephone.

Communication between the SOSC and the NOSC (2nd Level: on scene)

The communication between SOSC and NOSC should be performed on one or if needed, more of the international maritime VHF channels. Their first radio contact should be made on VHF channel 16, unless otherwise agreed. The SOSC will inform NOSC of the communication channels for the combating operation after check up of the possibilities in the area of operation (in consideration of Manuals, Pilots etc.).

To this end the vessel from which the SOSC operates should, as a rule, have at least two maritime VHF stations on board with a stand-by function on channel 16.

It is the responsibility of the Lead Country to obtain the permission from its national authority for combatting operations at sea, which could be given either as a general authorization to use the frequencies during combatting operations and combatting exercises or as a separate authorization for each combatting operation and combatting exercise. There are no common or special

VHF channels established for exclusive use in combating operations. If the establishment of such a channel for single combating operation or operating exercise is not possible, the chosen VHF channel shall be not seriously hampered by other traffic not relevant to the ongoing operation.

Communication between NOSCs

Under circumstances where one NOSC and his strike teams operate geographically close to another NOSC and his strike teams, a need may arise for direct communication between the two NOSCs in respect of navigation, manouvering and other operational matters.

In order to restrict the number of VHF channels in use, the communication between NOSCs should be performed on the same VHF channel as used for communication between the NOSCs and the SOSCs.

If more VHF channels are used for communication between the SOSC and the NOSCs, the communication plan should be established in such a way that NOSCs and their strike teams operating geographically close to other NOSCs and their strike teams should be allocated the same VHF channel for communication with the SOSC.

Communication between the NOSCs and their Strike Teams (3rd Level: teams)

The communication between a NOSC and his strike team units should be performed on special domestic (internal) frequencies.

Before deciding on the domestic frequencies a NOSC from another country than the Lead Country should check with the SOSC that the frequencies in question do not interfere with other frequencies used on the scene of action.

Communication between Strike Teams

It is anticipated that if a need for communication between strike teams arises under the same NOSC, this communication will be carried out on the same domestic frequencies as used for communication with the NOSC or on a special domestic frequency selected for internal communication between strike teams.

Due to the use of domestic frequencies between the NOSCs and their strike teams, direct communication between strike teams from NOSCs of different nationality cannot normally be expected.

TABLE 1
COMMAND STRUCTURE FOR JOINT COMBATTING OPERATIONS

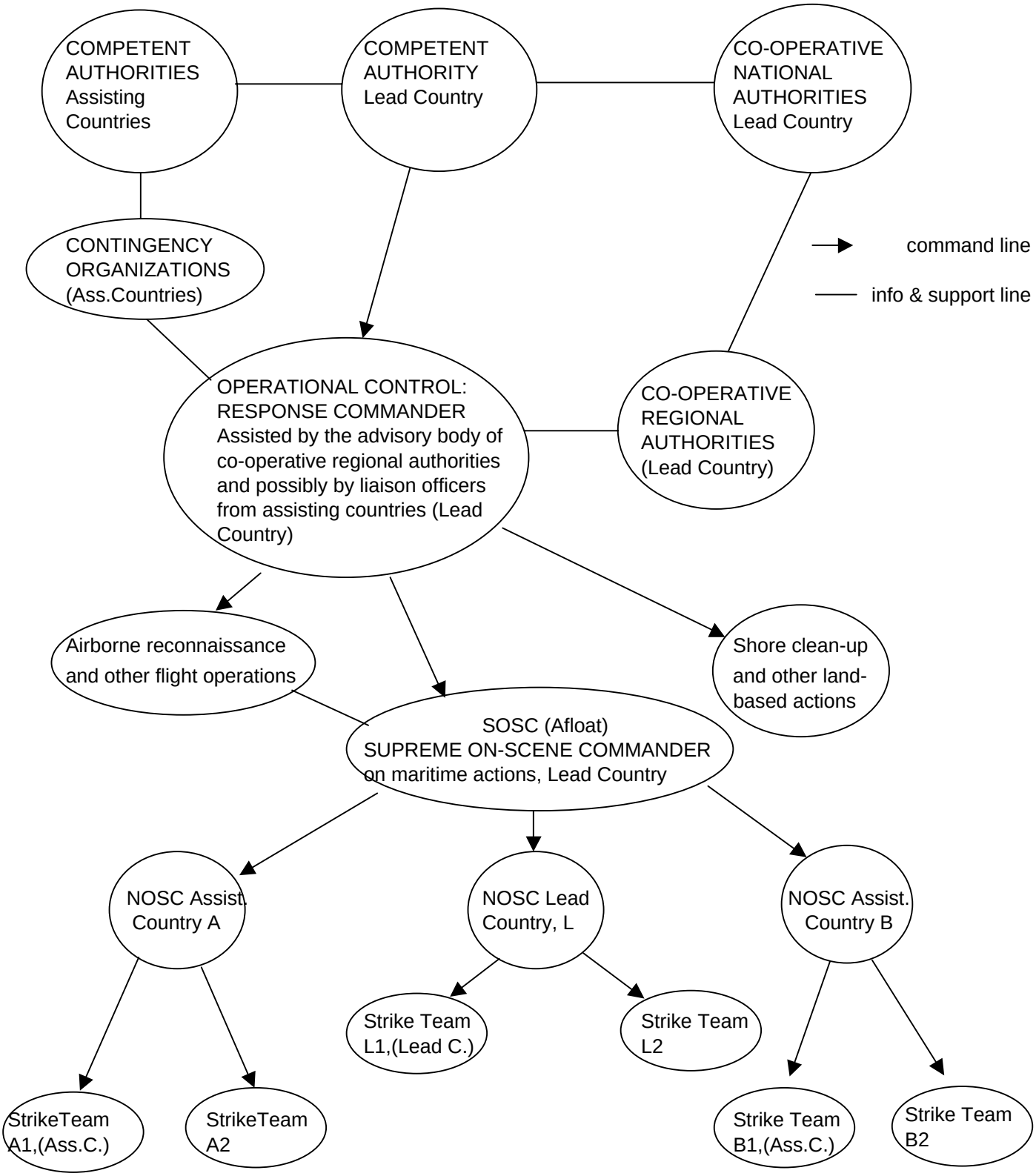


TABLE 2
BALTIC OVERALL COMMUNICATION PLAN FOR JOINT COMBATTING OPERATIONS

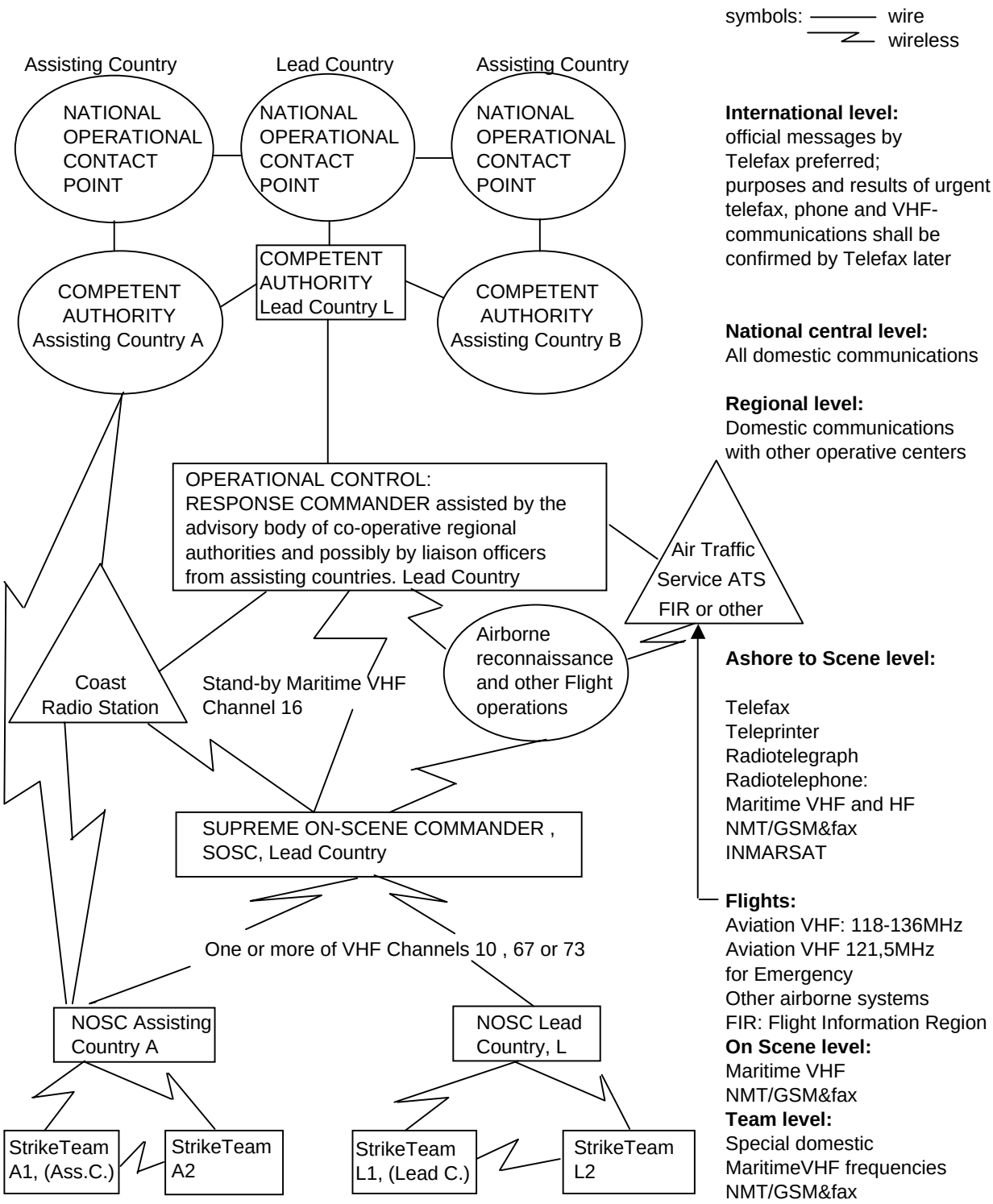
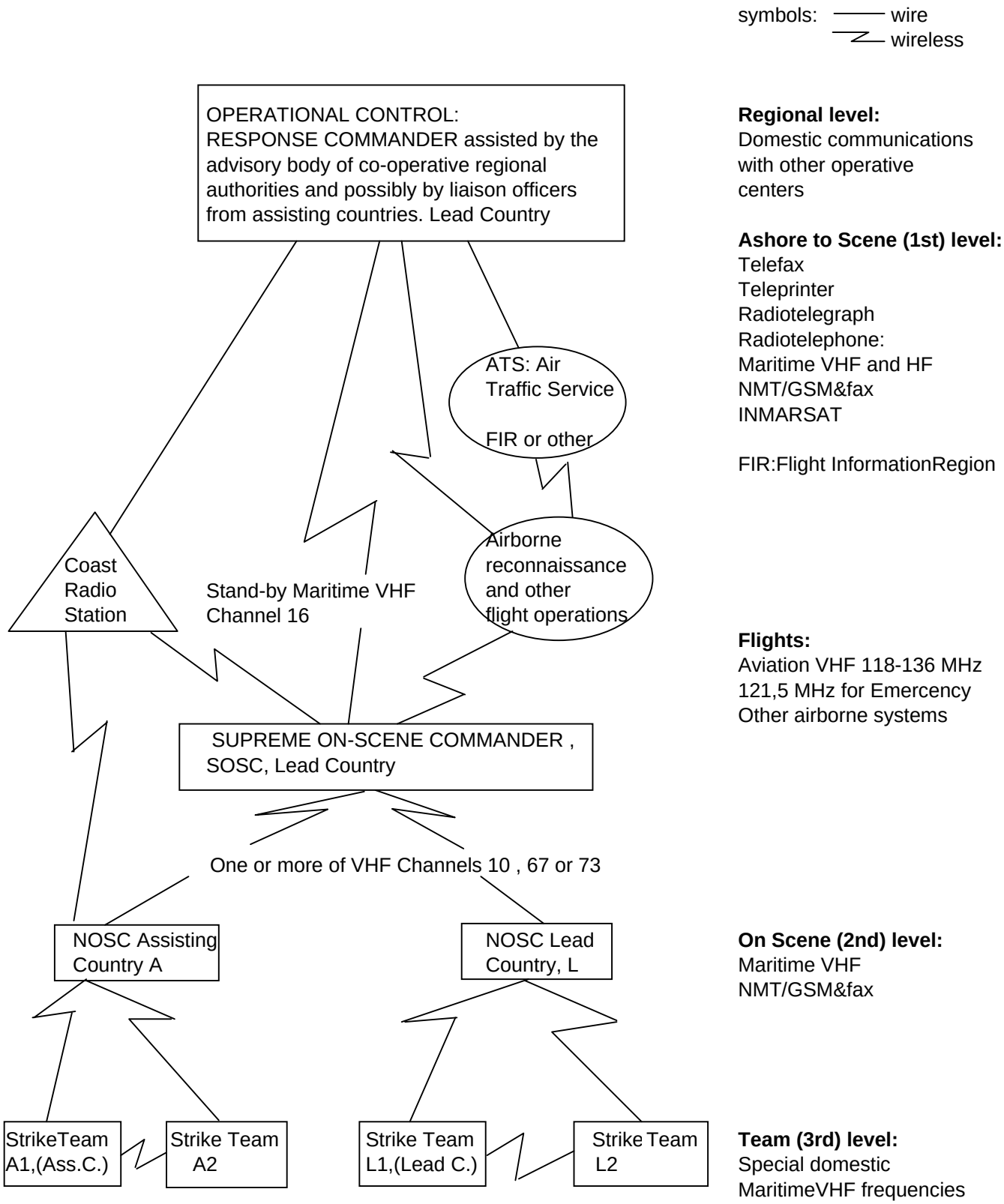


TABLE 3
BALTIC OPERATIVE COMMUNICATION PLAN FOR JOINT COMBATTING OPERATIONS



Regional level:
Domestic communications with other operative centers

Ashore to Scene (1st) level:
Telefax
Teleprinter
Radiotelegraph
Radiotelephone:
Maritime VHF and HF
NMT/GSM&fax
INMARSAT

FIR:Flight InformationRegion

Flights:
Aviation VHF 118-136 MHz
121,5 MHz for Emercency
Other airborne systems

On Scene (2nd) level:
Maritime VHF
NMT/GSM&fax

Team (3rd) level:
Special domestic MaritimeVHF frequencies
NMT/GSM&fax

6. OIL SAMPLING

6.1 INTRODUCTION

The 17th Meeting of the Combatting Committee of the Helsinki Commission approved the Guidelines on Spill Sampling (the Nordtest Method for Oil Spill Identification; NT CHEM 001, Edition 2; cf. document CC 17/8/1). The Nordtest Method is meanwhile introduced in the Bonn Agreement and the Copenhagen Agreement as well. It contains mainly provisions for securing evidences on discharges from ships and co-operation in investigating violations or suspected violations of discharges regulations. But on the other hand the compensation of spill clean-up costs in major response actions needs carefully secured evidence in order to avoid the refusal of claims for compensation (persistent oil) within the CLC and the IOPC Fund Conventions.

Gas chromatography combined with mass spectrometry analysis (GC/MS) has proved particularly useful for oil identification, compared with, for example, determinations of sulphur, nickel and vanadium.

The GC/MS method has been developed to recognise and take into account the impact of weathering on the identification process. Compounds analysed are common to most types of oil. These compounds are either unaffected or affected in a predictable manner by weathering.

The GC/MS method is not influenced by minor alterations in the sampling or handling techniques, nor is the GC/MS technique of the Nordtest Method limited to the parameters listed here.

Whenever possible it should be avoided, to the greatest possible extend, that the polluter could benefit from the doubts concerning his responsibility.

6.2 FIELD OF APPLICATION

The identification system is applicable to oil samples of petroleum origin, containing significant amounts of hydrocarbons with boiling points above 200 ^{O}C. Examples are crude oil, fuel oil, lubricating oil and mixtures, such as bilge oil and tank washings. The required sample volume is very small.

The use of this identification system requires that spill samples and samples taken from suspected sources be compared.

When samples from suspected sources are not available, the system may be used to characterise the spill sample. Administrative efforts may then be made to find the source responsible.

6.3 CHECKLIST FOR SAMPLING

The annexed checklist (Annexes 1, 2, 3 of the Nordtest Method) shall be applied when collecting and providing samples in order to determine the source of the spill.

ANNEX

I CHECKLIST FOR SPILL SAMPLING

General

1. Samples should be taken with sampling devices and containers of glass, teflon or stainless steel.

2. Preferably, at least 1 ml of oil should be sampled but no samples should be considered too small. If possible, a larger sample volume is recommended for additional analyses (100 ml).

3. If contamination of the sample is suspected, take blind samples from the possible contamination.

4. To permit cross-checking, three parallel samples should be taken from some of the localities. In larger spills, one sample per locality should be sufficient.

5. The sampling container should be properly labelled with all relevant information before sealing.

6. A sampling log book with all relevant information from the samples and the sampling environment should be kept.

7. The samples should be taken and handled under the supervision of authorised personnel. A chain of custody should be maintained until the identification process is concluded by the relevant authority.

8. If stored, all oil samples should be kept under lock and key in darkness at a maximum temperature of $+4\ ^{o}C$.

9. Oil samples should be taken to an authorised laboratory without unnecessary delay.

10. Packing and transport should be carried out in such a way that damage to the samples is avoided. Sorbent material should be used.

11. National regulations for transport of flammable materials should be followed.

12. Samples should be handled as if they were legal evidence.

Collection of samples from the water surface

1. Try to concentrate the oil fraction in the sample container by skinning the oil from the water. A bucket with small holes or a conical teflon bag can be used to concentrate the oil into the container.

2. Do not fill the container completely. Allow for thermal expansion of the sample.

3. If possible, sample oil from the thickest part of the slick.

4. In highly contaminated waters, e.g. harbours, take blind samples.

5. If a combat action against a waterborne oil spill lasts for several days, take oil samples every day for documentation of weathering and possible additional spills from other sources.

6. If other suspicious slicks occur, i.e. their appearance differs, or if slicks are observed a long distance from the expected site, take samples as required in order to ascertain whether more than one spill has occurred in the area.

Collection of samples from beaches

1. Take samples from the geographical edges of the polluted area to document the range of the spill.

2. Take samples from different localities within the polluted area to document the spill distribution.

3. Old tar balls, earlier oil spills, creosote from pier logs, etc. can contaminate the sample. Take blind samples if contamination is suspected.

4. Take relevant samples in order to ascertain whether more than one spill has occurred, whenever anything unusual or suspicious (colour, texture, etc.) is observed in the polluted area.

5. When seaweed, small pieces of wood or debris are contaminated by oil, the complete specimen can be placed in the sampling container.

Obtaining samples from oiled animals

1. Contaminated feathers and fur may be cut off and placed in the sample container.

2. Dead, oiled birds or other animals may be collected in plastic bags, labelled and frozen before sending to a laboratory.
3. Before sending any animals, make contact with the relevant authority to make proper arrangements for transport and storage.

4. Samples with large amounts of organic materials should be frozen to avoid biological decomposition.

II CHECKLIST FOR TAKING SAMPLES IN CARGO SYSTEMS OF OIL TANKERS

1. Identify the category of the tanker in relation to MARPOL requirements (i.e. COW, SBT, CBT or a tanker with conventional ballasting (below 4000 tdw). Copy the IOPP Certificate, including Supplement B.

2. Identify the loading condition of the ship (loaded, part-loaded or in ballast) and the quality of oil carried (last carried), and copy the bill of lading for the current (latest) voyage.

3. Study the oil record book and copy the pages dealing with the operations under investigation.

4. Obtain, if possible, a copy of the diagram of the cargo oil and ballast pumping and piping systems on the ship.

5. Study the printouts from the oil discharge monitoring and control systems and copy the parts covering the current (latest) ballast voyage.

6. Ascertain the current ballast or loading condition and identify tankers carrying ballast and tanks used for ballast during previous phases of the voyage.

7. Verify the status of the ship in the load-ballast handling cycle, i.e. whether it carries departure or arrival ballast, whether tank cleaning has been carried out during the voyage and whether water from the slop tanks has been discharged at sea.

8. Take oil samples representing the various qualities of cargo oil which the ship has carried during the current (latest) voyage, and mixtures which may have been generated. Take samples of oil remaining on board at locations where these are likely to collect, including (as applicable):

   8.1 reference samples carried on board

   8.2 all slop tanks (identify also the level of oil/water interface, the quantity of slop oil and the quantity of water in each slop tank)

   8.3 tanks which carry or have carried dirty ballast

   8.4 pump room bilges

   8.5 stripping pumps

   8.6 overboard cross-over line, both sides

   8.7 deballasting lines to sea chests, both sides

   8.8 cargo manifolds on deck

All samples taken must be clearly identified with respect to location and time when the sample was taken.

Take special care to obtain representative samples from slop tanks and bilges, where the composition of the oil may vary from place to place.

9. Note any additional observations which may be of any value in determining the likelihood that a discharge has taken place.

III CHECKLIST FOR TAKING SAMPLES IN MACHINERY SPACES OF SHIPS

1. Verify that the ship carries a valid IOPP Certificate. Note whether the ship is certified as being equipped with a 100 ppm or a 15 ppm oily water separator/filtering equipment. Ascertain whether it has been granted a waiver for any equipment. Copy the certificate, including Supplement A.

2. Study the oil record book (machinery part) and copy the pages covering the period under investigation.

3. Check levels and contents. Take samples from the following tanks and spaces:

   3.1 all bilge wells

   3.2 bilge water holding tank (note if no bilge water holding tank is installed)

   3.3 waste oil tanks (the ship may have several)

   3.4 overflow tank for bunker oil

   3.5 fuel and lube oil purifier sludge tanks

   3.6 empty bunker tanks which may have been used for water ballast

4. Also take samples from:

   4.1 service tanks (day tanks) for the engines

   4.2 the bilge water separator outlet piping

   4.3 the sludge pump outlet piping

5. Inspect the bilge water separating/filtering equipment (note the liquid content at the test cocks, request opening of the filtering unit if saturation may be expected).

6. Inspect the tank top for accumulation of oil and sludge.

7. Note the type of cleaning agent used in the engine room and the claimed rate of consumption.

8. If the ship is of 10,000 GRT or above and has a 100 ppm separator, inspect the oil content meter and its recorder. Copy the recorder printout for the period under investigation.

HELCOM Response Manual Volume 1 (Oil), Chapter 7 updated December 2008

7. CO-OPERATION ON AERIAL SURVEILLANCE OVER THE BALTIC SEA AREA

7.1 INTRODUCTION

Co-operation on surveillance within the Helsinki Convention is carried out in accordance with Regulations 1, 4, a) and 3, 1. and 2. of Annex VII to the Helsinki Convention and HELCOM Recommendation 12/8.

The purpose of aerial surveillance is to detect spills of oil and other harmful substances which can threaten the marine environment of the Baltic Sea area. These spills caused by accident or made in contravention of international Conventions will be registered and, if possible, sampled from both the sea surface and on board the suspected offender.

The aerial surveillance is complemented by satellite surveillance to enable bigger area coverage and optimisation of flights effectiveness.

Within the framework of the Helsinki Convention it has been decided to establish close co-operation on airborne surveillance. This will be achieved by

a. regular National Flights
b. setting up special flights such as CEPCO Flights
c. standardization of reporting formats and exchange of information to Contracting Parties
d. working together in improving existing systems and developing new techniques to enhance the information obtained.

7.2 PARTICIPATING STATES

All Contracting Parties to the Helsinki Convention have agreed to participate in the collaboration to the best of their ability. Each State operates in its own response region except for CEPCO Flights. Not all states have delimited their response regions, but the response region should be used as far as possible.

7.3 CO-OPERATION

The Informal Working Group on Aerial Surveillance is, under the auspices of the Response Group (HELCOM RESPONSE), responsible for the co-operation in the field of joint aerial surveillance as well as for co-ordination of the satellite based oil spill surveillance and evaluation of its results and operational effectiveness. In the regular meetings the Contracting Parties appoint one Contracting Party to be Lead Country for the Informal Working Group for an agreed period. The tasks to be undertaken are stated in terms of reference for the Lead Country and for the Informal Working Group on Aerial Surveillance (cf. Annex 5, the Minutes of HELCOM RESPONSE 8/2007).

7.4 FLIGHT TYPES

Three various types of flights are carried out.

National flights

National flights are conducted to the extent and with the timetable which is decided by each of the Contracting Parties themselves. The results of the surveillance are to be reported

yearly to the Response Group in accordance with the agreed HELCOM annual reporting format on illegal discharges observed during aerial and satellite surveillance.

CEPCO Flights ("Coordinated Extended Pollution Control Operation Flights")

The aim of CEPCO Flights is a continuous flight activity within the responsibility zones of neighbouring countries. According to a prefixed flight schedule surveillance aircraft of several countries adjoining the chosen CEPCO Flight routines have to maintain for 24 hours (or even more) a continuous surveillance flying along the prefixed flight patterns. The chosen flight routes are where the likelihood spills is higher than in other areas with sporadic traffic: Each year a CEPCO North and a CEPCO South Flight are carried out with the participation of interested countries located close to the selected surveillance area.

In order to shorten the approaching time of participating aircraft the chosen airport/air base should be located close to the respective area. The airport must ensure a day and night service for forthrunning landing, starting, and preferably ground power facility for stand-by.

The route length should be oriented on the lowest endurance time/endurance distance of the relevant aircraft.

Route planning must exclude restricted areas for flight operations.

Diplomatic clearance for flights within neighbouring territorial waters must be sought for well in advance of the CEPCO operation.

A communication scheme between the surveillance aircraft and patrol vessels must be disseminated to all participating Parties in order to ensure a close co-operation between aerial observations/-detections and subsequent law enforcement and/or prosecution measures including sampling by patrol vessels.

CEPCO Flights should be supported as far as possible with satellite images covering the operation area in order to provide indication of possible oil slicks.

All the participating countries must ensure a day and night service of their National Reporting Centres (R.C.); the hosting country uses its R.C. during the CEPCO Flight conduction as lead agency also for the coordination of unforeseeable events.

In case of having caught a polluter red-handed an urgent notice shall be sent to the R.C. in whose area the suspected pollution was detected.

“Small” CEPCO Flights

Small CEPCO Flights may be arranged by neighbouring countries, during which a common area is continuously overflown for 24 hours or more.

To reduce the cost of the operation, the participating aircraft will use their normal national airports during the operation.

7.5 GUIDELINES FOR NATIONAL AERIAL SURVEILLANCE IN THE BALTIC SEA AREA

7.5.1 Introduction

The aim of the following provisions for surveillance flight planning is to give guidance for reconnaissance flights and to implement the first part of HELCOM Recommendation 12/8, namely to intensify their endeavours to cover by individual or joint action the whole of the Baltic Sea Area with regular and efficient airborne surveillance (cf. also Regulations 1, 4.a) and 3.1 of Annex VII to the Helsinki Convention).

The detection of MARPOL 73/78 offenders and the early discovery of marine pollution shall enhance the deterrent effect for illegal discharges and should facilitate rapid discovery and recovery of marine pollution.

Recommendation 12/8 contains a wide range for national interpretation of a regular and efficient airborne surveillance and its implementation in national responsibility zones.

For instance the national summaries on observed marine pollution incidents can be evaluated with reliability only if the flights are made according to an agreed surveillance scheme with

- a minimum of regularly flown operations
- in areas with a certain ship traffic density, fishing and offshore activities
- flown in sufficient weather and visibility conditions
- use of remote sensing equipment.

7.5.2 General rules for a minimum of regular surveillance flights

Flight frequency

All coastal States should endeavour to fly - as a minimum - twice per week over regular traffic zones including approaches to major sea ports as well as in regions with regular offshore activities.

Experienced observers/pilots shall hereby contribute reliable detections, classifications and quantification of observed pollution, their frequencies and geographical distributions.

Other regions with sporadic traffic and fishing activities should be covered once per week.

It is recognized that there might be some limitations to carrying out the surveillance flights due to weather conditions and that all flights will be performed according to national flight operational manuals.

Priority at the flight planning must always be given to the detection and identification of polluters.

Geographical coverage - Detection range for a Minimum of Flight Operations

Flights with SLAR systems

A coverage of approximately 60 km per flight pattern could be assumed if a SLAR is used for detection of polluters and pollutions and if the detection capacity is not limited by sea state 6 and /or wind force 6-7 and more.

Flights without SLAR systems

The visual detection range under normal visibility conditions can be assumed with 20 km; only under extremely good horizontal and vertical visibility can a detection range of 40 km be covered. However, a maximum cover range of 15 km on both sides of the flight patterns

should be the basis for a minimum of flight hours for National Flights in order to ensure reliable and comparable observation conditions.

7.5.3 Additional remarks concerning flights flown in darkness or poor visibility with RSS

Flights in darkness or poor visibility have a limited possibility to identify offenders of the MARPOL 73/78, on the other hand it is a well-known fact that many potential polluters prefer the limited visibility for deliberate discharges of oily residues from ships operation.

Consequently, the Contracting Parties with reliable detection and identification systems in addition to the minimum frequency - see sub-chapter 7.5.2 - should envisage a certain flight proportion for detection of polluters at night or during poor visibility.

7.6 GUIDELINES FOR SATELLITE SURVEILLANCE IN THE BALTIC SEA AREA

Satellite surveillance is an important tool supporting aerial surveillance in the Baltic Sea area. It is recommended that satellite indications are checked as soon as possible by aerial surveillance or other means available.

IWGAS is responsible for defining the total operational needs for satellite images in the Baltic Sea and agrees on common practices.

7.7 REPORTING

Reporting formats

To record the flights the following two formats should be used:

1. BONN Agreement/HELCOM Standard Pollution Reporting Format (electronic version of the format and related Completion Guide are available on HELCOM web site: http://www.helcom.fi/shipping/waste/en_GB/surveilance/)

2. HELCOM annual reporting format on illegal discharges observed during aerial and satellite surveillance

The pollution observation log should always be filled in, even when no spills were observed.

STANDARD POLLUTION REPORTING FORMAT)
http://www.helcom.fi/stc/files/shipping/Pollution_Report_Master.xls

HELCOM Annual reporting format on illegal discharges observed during aerial and satellite surveillance

I. DEFINITIONS USED IN THE REPORTING OF DATA FROM

Aerial Surveillance

Country	Name of the Contracting Party reporting.
One Flight	Unit of operation between take-off and next landing.
No. of flight hours	Nationally allocated flight hours carried out by trained observers per Contracting Party.
Day (daylight)	From 30 minutes after Morning Civil Twilight, until 30 minutes before Evening Civil Twilight as given in the Air Almanac.
Night (darkness)	From 30 minutes before Evening Civil Twilight, until 30 minutes after Morning Civil Twilight as given in the Air Almanac.
Detections	Number of first reports on possible pollutions obtained in aerial operations (raw data).
Detections confirmed	Number of the total detections (first reports) that have been verified and/or identified by means of instruments or visually and are confirmed by a trained operator as a pollution.
Estimated volume of a spill	Total volume of one spill calculated using the Bonn Agreement Oil Appearance Code.
Identified polluter	Name of vessel, platform or other source positively identified as the polluter.
Slick	An area of (possible) pollution.
Spill	A collection of one or more slicks originating from the same source.
Remarks	This column should be used to inform on particular situations.

Satellite Surveillance

Satellite detections	The number of satellite detections is the number of reports obtained through satellite detections within the EEZ of the contracting party – including those obtained from other countries
Confirmed mineral oil	The number of verified/investigated satellite detections consisting of mineral oil.
Confirmed other oil or chemical	The number of verified/investigated satellite detections consisting of vegetable or fish oil or chemical.
Confirmed natural phenomena	The number of verified/investigated satellite detections consisting of algae or natural phenomena as currents, waves, ice etc.
No detections	The number of verified/investigated satellite detections that nothing has been found.

II. Reporting format

Contracting Parties should report on their entire annual surveillance activity in the reporting year including the data obtained for areas outside their responsibility zone. The following format (tables 1 to 4 and any additional national comments) should be used:

Table 1. National flights

Annual overview in columns and rows.

Country	No. of flight hours		No. of detections		Detections confirmed/ observed as mineral oil spills		Estimated Volume	No. of polluters[1]			Remarks[2]
	Daylight	Darkness	Daylight	Darkness	Daylight	Darkness	m^3	Rigs	Ships	Unknown	
Inside own EEZ											
Outside own EEZ											
Detections made inside EEZ by other Contracting Parties											

Table 2. All flights

Only the mineral oil spills detected inside the EEZ are reported (see the instructions for Table 3).

	No. of spills detected	Spill IDs (cf. Table 3)
< $1m^3$		
1-10 m^3		
10-100 m^3		
> 100 m^3		

[1] The sum of Rigs+Ships+Unknown must equal the sum of Daylight+Darkness under “Detections confirmed / observed as oil spills”

[2] Additional remarks in case of accidental spills and quantities of those.

Additional remarks on unconfirmed pollution detection.

Additional explanatory notes or national comments can be added on an extra page. This information will be used for the text of the annual report.

Table 3. Information on observed spills[3] (*updated March 2010*)

Spill ID	Date	Time in UTC	Position[4]		Estimated volume	Confirmed source	Detection made by	Case file name
			Latitude	Longitude	m^3		CP code	
5						6	7	8

Table 4. Satellite surveillance

	No. of detections
Satellite detections	
Confirmed mineral oil	
Confirmed other pollution or unknown substances	
Confirmed natural phenomena	
No detections	

[3] When reporting the annual data to the HELCOM Secretariat, Table 3 should include only those spills that are inside the Contracting Party's own EEZ. A Contracting Party has to (using Table 3) send a compilation of the spills detected in other Contracting Parties' EEZs to the Contracting Party in question at least three weeks prior to the Secretariat's deadline. The Contracting Party that received the details of the spills detected by others, will compare the data with their national data, delete the doubles and report all spills inside their EEZ - also those detected by other Contracting Parties - to the HELCOM Secretariat (using Table 3).

[4] In decimal degrees, i.e. with the minutes and seconds converted to a decimal function of the degree. Longitude west is taken as negative. Latitude and longitude should each occupy a separate cell in a table.

[5] When a Contracting Party is confident that a particular spill observed on subsequent flights is actually the same slick, this slick should only be reported once with the most appropriate position (e.g. first observed position). Spills can be numbered as e.g. "NL-07", i.e. Country (B, DK, F, G, NL, N, S, UK) + Number (1 to …).

[6] Insert "SHIP" or "RIG" as appropriate.

[7] Contracting Parties should identify in this column, by writing a two letter code (DK for Denmark etc) which CP made the detection.

[8] To be filled in only when either "SHIP" or "RIG" has been entered in the previous column. Insert the name of the case file used in your country when an administrative or judicial follow-up has been instituted.

7.8 AVAILABLE AIRCRAFT AND FLIGHT HOURS

The information of all Contracting Parties is available via the MARIS system:
http://www.helcom.fi/gis/maris/en_GB/main/

7.9 LIST OF RESPONSIBLE AUTHORITIES

DENMARK

Emergency numbers for public use	
Admiral Danish Fleet Operations Centre	**Tel**: +45 89 43 30 99 **Fax**: + 45 89 43 32 30 **E-mail**: o-rum@sok.dk
Operational contact point on 24 hour duty	
Admiral Danish Fleet Operations Centre	**Tel**: +45 89 43 32 03 **Fax**: + 45 89 43 32 30 **E-mail**: o-rum@sok.dk
Administrative contact point	
Admiral Danish Fleet Maritime Environment Section PO Box 483 DK-8100 Aarhus C	**Tel**: +45 89 43 33 81 **Fax**: +45 89 43 33 88 **E-mail**: pol.con.den@sok.dk

Danish link: http://www.cis.forsvaret.dk/

ESTONIA

Joint Rescue Coordination Centre (JRCC TALLINN) Süsta 15 EE-11712 Tallinn	**Tel**: +372 619 1124, +372 692 2500 +372 692 2271 (Aviation Group) **Fax**: +372 692 2501 **E-mail**: NCC_estonia@pv.ee

Estonian link: http://www.envir.ee/helcom/Aerial.htm

FINLAND

Finnish Environment Institute (SYKE) P.O. Box 140 FI-00251 Helsinki	**Tel**: +358 20 610 123 (office hours) **Fax**: +358 9 54 902 478 (office hours) **E-mail**: name@environment.fi where name=oilduty

Finnish link: http://wwwi.ymparisto.fi/oilspill/helcom/aircraft.htm
last update 9.10.2009

GERMANY

Office hours)	
Central Command for Maritime Emergencies (CCME) Section 2 c/o WSA Cuxhaven Am Alten Hafen 2 D-27472 Cuxhaven	**Tel**: +49 4721 567 480 / 567 482 **Fax**: +49 4721 567 490 **E-mail**: FB2@havariekommando.de

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following link:
http://www.havariekommando.de/en/cis/

LATVIA

Emergencies	
Maritime Rescue Coordination Centre (MRCC Riga) Meldru 5a LV-1015 Riga	**Tel**: +371 67323103 (emergency), +371 29476101, +371 67082070 **Fax**: +371 67320100, +371 29270690 **E-mail:** sar@mrcc.lv **Inmarsat-C**: 581-427518510
Inquiries	
Marine and Inland Waters Administration Voleru 2 LV-1007 Riga	**Tel**: +371 29544526 (24 hrs), +371 67469664 (office hrs) **Fax**: +371 67465888, +371 67408166 **E-mail**: jiup@jiup.vvd.gov.lv

Maritime Administration of Latvia Trijadibas 5 LV-1048 Riga	**Tel**: +371 67062101 **Fax**: +371 67860082 **E-mail**: lja@lja.lv

Latvian link: http://www.jiup.vvd.gov.lv/spill

LITHUANIA

Raimondas Satkauskas Marine Environment Protection Agency Environmental Protection Department of Klaipeda Region Zalgirio St.11 a LT-93251 Klaipeda	**Tel**: +370 46 341607 **Fax**: +370 46 341610 **E-mail**: r.satkauskas@klrd.am.lt

POLAND

Maritime Office in Gdynia Ul. Chrzanowskiego 10 PL-81 338 Gdynia	**Tel**: +48 58 21 61 62 (24 hours) +48 58 20 58 25 **Fax**: +48 58 20 67 43

Polish link: http://osc.ums.gov.pl/modules.php?name=Sections&op=viewarticle&artid=23

RUSSIA

SWEDEN

Swedish Coast Guard Headquarters Box 536 SE-371 23 Karlskrona	**Tel**: + 46 455 35 34 00 **Fax**: + 46 455 105 21 **E-mail**: kcl@coastguard.se

Swedish link: http://www.coastguard.se/ra/helcom/aerial.htm
last update 3.9.2002

7.10 LIST OF CONTACT POINTS; JOINT AERIAL SURVEILLANCE IN THE BALTIC

DENMARK

Emergencies (24 hrs)	
Emergency numbers for public use	
Admiral Danish Fleet Operations Centre	**Tel**: +45 89 43 30 99 **Fax**: + 45 89 43 32 30 **E-mail**: o-rum@sok.dk
Operational contact point on 24 hour duty	
Admiral Danish Fleet Operations Centre	**Tel**: +45 89 43 32 03 **Fax**: + 45 89 43 32 30 **E-mail**: o-rum@sok.dk
Inquiries (office hrs)	
Administrative contact point	
Admiral Danish Fleet Maritime Environment Section PO Box 483 DK-8100 Aarhus C	**Tel**: +45 89 43 33 81 **Fax**: +45 89 43 33 88 **E-mail**: pol.con.den@sok.dk

Danish link: http://www.cis.forsvaret.dk/

ESTONIA

Joint Rescue Coordination Centre (JRCC TALLINN) Süsta 15 EE-11712 Tallinn	**Tel**: +372 61 1124 (alarm), +372 692 2500 (24 hours) **Fax**: +372 692 2501 (24 hours) **E-mail**: NCC_estonia@pv.ee

Estonian link: http://www.envir.ee/helcom/Aerial.htm

FINLAND

MRCC Turku Operations Center of the Guard P.O. Box 16 FI-20101 Turku	**Tel**: +358 204 1000 (24 hours) **Fax**: +358 71 872 7019 (24 hours)

Finnish link: http://wwwi.ymparisto.fi/oilspill/helcom/aircraft.htm
last update 9.10.2009

GERMANY

Emergencies (24/7) Central Command for Maritime Emergencies (CCME) Maritimes Lagezentrum Cuxhaven (MLZ) c/o WSA Cuxhaven Am Alten Hafen 2 D-27472 Cuxhaven	Tel: +49 4721 567 485 / 567 392 Fax: +49 4721 554 744 / 745 Email: mlz@havariekommando.de
Administrative Contact Point (for Inquiries, office hours) Central Command for Maritime Emergencies (CCME) Section 2 c/o WSA Cuxhaven Am Alten Hafen 2 D-27472 Cuxhaven	Tel: +49 4721 567 480 / 567 482 Fax: +49 4721 567 490 Email: FB2@havariekommando.de

For more information on responsibility for counter-pollution measures at sea and on land as well as on oil recovery equipment, please visit the following link:

http://www.havariekommando.de/en/cis/

LATVIA

Emergencies	
Maritime Rescue Coordination Centre (MRCC Riga) Meldru 5a LV-1015 Riga	**Tel**: +371 67323103 (emergency), +371 29476101, +371 67082070 **Fax**: +371 67320100, +371 29270690 **E-mail:** sar@mrcc.lv
Inquiries	

Marine and Inland Waters Administration Voleru 2 LV-1007 Riga	**Tel**: +371 29544526 (24 hrs), +371 67469664 (office hrs) **Fax**: +371 67465888, +371 67408166 **E-mail**: jiup@jiup.vvd.gov.lv

Maritime Administration of Latvia Trijadibas 5 LV-1048 Riga	**Tel**: +371 67062101 **Fax**: +371 67860082 **E-mail**: lja@lja.lv

Latvian link: http://www.jiup.vvd.gov.lv/spill

LITHUANIA

Raimondas Satkauskas Marine Environment Protection Agency Environmental Protection Department of Klaipeda Region Zalgirio St.11 a LT-93251 Klaipeda	**Tel**: +370 46 341607 **Fax**: +370 46 341610 **E-mail**: r.satkauskas@klrd.am.lt

POLAND

Maritime Office in Gdynia Ul. Chrzanowskiego 10 PL-81 338 Gdynia	**Tel**: +48 58 21 61 62 (24 hours) +48 58 20 58 25 **Fax**: +48 58 20 67 43

Polish link: http://osc.ums.gov.pl/modules.php?name=Sections&op=viewarticle&artid=23

RUSSIA

SWEDEN

Swedish Coast Guard Flight Command Box 536 SE-371 23 Karlskrona	**Tel**: + 46 455 35 34 00 **Fax**: + 46 455 105 21 **E-mail**: registrator.flyg@coastguard.se

Swedish link: http://www.coastguard.se/ra/helcom/aerial.htm (last update 3.9.2002)

7.11 LIST OF REFERENCE POINTS

National indicators are as follows:

Denmark	**DK**
Estonia	**EE**
Finland	**FI**
Germany	**DE**
Latvia	**LV**
Lithuania	**LT**
Poland	**PL**
Russia	**RU**
Sweden	**SE**

The reference points are situated in the Baltic.

NUMBER	***NAME***	***POSITION***	
DENMARK			
DK 52	Läsö Trindel	57 28' N	11 18' E
DK 53	Anholt Ö	56 45' N	11 45' E
DK 54	Anholt V	56 41' N	11 00' E
DK 55	Gilleleje N	56 18' N	12 00' E
DK 56	Sletterhage	56 05' N	10 24' E
DK 57	Kronborg	56 03' N	12 37' E
DK 58	Sj. Odde	56 01' N	11 05' E
DK 59	Hatter Barn	55 53' N	10 49' E
DK 60	Romsö Tue	55 34' N	10 49' E
DK 61	Drogden	55 32' N	12 42' E
DK 62	Köge Bugt	55 26' N	12 35' E
DK 63	Lille Bält	55 25' N	09 41' E
DK 64	Hov	55 12' N	11 00' E
DK 65	Krigers Flak	55 07' N	12 50' E
DK 66	Vejrö	55 04' N	11 16' E
DK 67	Mön	54 03' N	12 38' E
DK 68	Grönsund	54 48' N	12 14' E
DK 69	Keldsnor	54 41' N	10 42' E
DK 70	Gedser	54 34' N	11 58' E
DK 71	Hammeren	55 19' N	14 46' E
DK 72	16 öst	55 25' N	16 00' E
DK 73	Due Odde	54 59' N	15 04' E

ESTONIA

EE 1		59 22' N	23 20' E
EE 2		59 00' N	21 51' E
EE 3		58 23' N	21 34' E
EE 4		57 54' N	21 35' E
EE 5	Naissaar	59 35' N	24 30' E
EE 6	Keri	59 41' N	25 01' E
EE 7	Vaindlo	59 49' N	26 21' E
EE 8	Uhtju	59 39' N	26 32' E

FINLAND

FI 1	Kemi1	65°23,1' N	24°06,0' E
FI 2	Nahkiainen	64°36,5' N	23°55' E
FI 3	Ulkokalla	64°20' N	23°27' E
FI 4	Valassaaret	63°26,1' N	21°04,5' E
FI 5	Norrskär	63°14,8' N	20°36,4' E
FI 6	Ritgrund	63°25,5' N	21°30,9' E
FI 7	Strömmings-Bådan	62°58,8' N	20°44,6' E
FI 8	Santio	60°27,3' N	27°43,6' E
FI 9	Sälskär	60°24,7' N	19°35,8' E
FI 10	Haapasaari	60°17,2' N	27°11,3' E
FI 11	Enskär	60°13,2' N	19°18,8' E
FI 12	Kotkan majakka	60°10,3' N	26°39,2' E
FI 13	Airisto	60°25' N	22°05' E
FI 14	Kaunissaari	60°22' N	26°45' E
FI 15	Tiiskeri	60°10' N	26°16' E
FI 16	Söderskär	60°06,5' N	25°24' E
FI 17	Kihti	60°00' N	21°04' E
FI 18		59°52,0' N	24°55,0' E
FI 19	Flötjan	59°48,5' N	19°47,4' E
FI 20		59°40,0' N	23°55,0' E
FI 21	Bogskär	59°30,3' N	20°21,3' E
FI 22		59°00,0' N	21°00,0' E
FI 23	Kalbådagrund	59°59,1' N	25°36,1' E
FI 24		59°56' N	24°21' E
FI 25	Utö	59°47' N	21°22' E
FI 26	Russarö	59°47' N	22°57' E
FI 27	Jussarö	59°47' N	23°33' E

GERMANY

G20	N54°06,80'	E010°59,00'
G21	N54°41,20'	E012°56,60'
G22	N54°12,00'	E013°19,00'
G23	N54°13,00'	E013°50,00'
G24	N54°55,00'	E013°34,00'
G25	N54°50,00	E012°41,00'
G26	N54°28,00'	E011°39,00'

G27	N54°40,00'	E011°00,00'
G28	N54°50,30'	E009°51,50'
G29	N54°50,20'	E008°23,00'
SDG1	N54°41,20'	E012°56,60'
SDG2	N54°55,00'	E014°20,70'
SDG3	N55°15,00'	E014°20,00'
SDG4	N55°09,80'	E013°02,20'
SDG5	N54°50,00'	E012°41,00'

LATVIA

LV	57 54' N	20 15' E
LV	56 00' N	19 14' E
LV	57 54' N	21 30' E
LV	56 00' N	19 52' E

LITHUANIA

POLAND

PL 1	54 46' N	19 16' E
PL 2	55 50' N	18 52' E
PL 3	55 50' N	18 24' E
PL 4	55 05' N	15 35' E
PL 5	54 46' N	15 25' E
PL 6	54 46' N	14 53' E
PL 7	54 21' N	14 10' E
PL 8	53 58' N	14 23' E
PL 9	55 29' N	18 11' E
PL 10	55 00' N	18 20' E
PL 11	54 40' N	19 00' E
Rebiechowo	54 22,41 N	18 28,05 E

RUSSIA

Baltic Proper

RU 1	59 15' N	22 00' E
RU 2	59 00' N	21 10' E
RU 3	57 55' N	20 30' E
RU 4	55 40' N	19 00' E
RU 5	54 50' N	19 30' E
RU 6	55 20' N	19 30' E
RU 7	55 40' N	19 40' E
RU 8	56 15' N	20 10' E

RU 9		57 33' N	21 00' E
RU 10		59 00' N	21 20' E

Gulf of Finland

RU 11	Port Leningrad		
RU 12	Island Kotlin		
RU 13	Island Seskar		
RU 14	Island Moschny		
RU 15	Island Tjutersy		
RU 16	Ustj-Luga Town		
RU 17	Ustj-Narva Town		
RU 18	Island Gogland		
RU 19	Vyborg Town		

SWEDEN

SE 101	Malören	65 32' N	23 34' E
SE 102		65 21,8 N	23 55' E
SE 103	Farstugrund	65 20' N	22 45' E
SE 104		64 30' N	21 30' E
SE 105		63 40' N	21 30' E
SE 106	Västra Kvarken	63 40' N	20 40' E
SE 107		63 29,1 N	20 41,8 E
SE 108		63 29' N	20 27' E
SE 109		63 20' N	20 24' E
SE 110		62 42,3 N	19 31,5 E
SE 111	Vänta Litets grund	62 30' N	18 17' E
SE 112	Brämön	62 13' N	17 45' E
SE 113	Västra Banken	60 53' N	17 56' E
SE 201		60 36,6 N	19 13' E
SE 202	Understen	60 17' N	18 55' E
SE 203	Svenska Björn	59 33' N	20 01' N
SE 204		58 46,8 N	20 28,7 E
SE 205	Landsort	58 44' N	17 52' E
SE 206		58 20' N	17 50' E
SE 207		58 13,6 N	18 39,5 E
SE 208		58 03,9 N	19 43' E
SE 209		57 54,7 N	20 24,9 E
SE 210		57 40' N	17 30' E
SE 211		56 50' N	18 30' E
SE 212		55 57,3 N	19 04' E
SE 301	Ölandsbroen	56 41' N	16 24' E

SE 302	Ölands Södra grund	56 04' N	16 41' E
SE 303		55 52,9 N	18 54' E
SE 304		55 55,3 N	18 21,8 E
SE 305		55 21,3 N	16 30,5 E
SE 306		55 44,8 N	15 43' E
SE 307		55 41,5 N	15 02,6 E
SE 308	Bornholms Gattet	55 18,7 N	14 27,6 E
SE 309		55 10' N	14 00' E
SE 310		54 57,8 N	13 59,7 E
SE 311		55 01,3 N	13 47,1 E
SE 312		55 00,6 N	13 08,8 E
SE 313		55 20,2 N	12 38,5 E
SE 314		55 40' N	12 56,3 E
SE 315		56 02,7 N	12 40,9 E
SE 316		56 13' N	12 21,8 E
SE 401		56 18,2 N	12 05,3 E
SE 402		56 30' N	12 30' E
SE 403		56 30,5	12 08,9 E
SE 404		57 30' N	11 30' E
SE 405		57 27' N	11 23,9 E
SE 406		57 49' N	11 02,9 E
SE 407		58 08' N	10 32,5 E
SE 408		58 15,7 N	10 01,8 E
SE 409		58 30,7 N	10 08,8 E
SE 410		58 45,7 N	10 35,7 E

8. ADMINISTRATIVE AND ORGANISATIONAL ASPECTS

8.1 TRANSFRONTIER MOVEMENT OF STATE-OWNED AIRCRAFT, SHIPS AND VEHICLES, PERSONNEL AND EQUIPMENT AS WELL AS OF PRIVATELY OWNED RESOURCES UNDER GOVERNMENTAL CONTRACT

International formalities could cause inconvenient delays in an emergency situation and differ from one State to another. Possible remedies:

- The requesting Party should make all appropriate efforts to facilitate transfrontier movements in an emergency situation and should send a liaison officer able to communicate with the assisting personnel in a language known to them to meet the assisting Party at the border. The rank of the liaison officer is left to the decision of the requesting Party in each case.

- In cases of joint counter-pollution operations and joint exercises, and in joint aerial surveillance flights, the Contracting Parties should undertake to facilitate the granting of all clearances and permissions required for the aircraft of other Contracting Parties to carry out their mission in their airspace and over their territory.

8.2 CUSTOMS MATTERS

There are at least four possible courses of action:

- Instead of taking any specific action, solutions are left to be found on an ad hoc basis at the time of joint operations.

- Bodies which are likely to be involved in joint operations should observe instructions in the Manual outlining the procedures to be followed in the event of joint operations involving the completion of customs formalities.

- The customs authorities should be asked to take part in the preparation of contingency plans for joint operations in order to advice on solutions to problems of formalities in both the despatch and receipt of assistance; where possible, documents should be prepared in advance. As well as customs documents, detailed lists of goods to be transported could be prepared before the operation begins.

- A mutual assistance network should be established so that there is a customs correspondent in each country who can be contacted by his opposite number in another country to facilitate operations.

It is necessary to recall that there is a customs duty to be paid on goods that are used in joint operations; such duty should be relieved by one or other of the following methods:

- if the goods are not to be re-exported (e.g., dispersants), they should enjoy relief from import duties;

- if the goods are to be re-exported (e.g., mechanical recovery means), they should be granted temporary importation arrangements.

8.3 SPECIAL TAXES AND TRAFFIC FEES APPLICABLE TO VEHICLES FOR ASSISTANCE PURPOSE

Possible remedies:

- The imposition of special taxes and traffic fees on assisting vehicles could be lifted on the initiative of the assisted Party. Alternatively the Party concerned should use all its influence to renounce the fees or special taxes arising at border passage; in future such costs could be a component of the later reimbursement by the assisted Party.

- Information about national traffic regulations stipulating conditions for using vehicles to be given when necessary to the assisting Party at the border.

8.4 CONDITIONS OF WORK

There is no problem with the crew of vessels.

As regards assistance on land, there would probably be difficulties in waiving the national laws of the assisted Party, and in requiring the assisting Party to comply with rules other than those applicable to them nationally.

Possible remedies:

It could be the responsibility of the SOSC to ensure that national rules are observed for personnel under his command. It should be the responsibility of the NOSC to ensure that the personnel under his command comply with the national rules of the assisting country. The respective authorities of the assisted Party are responsible for informing the heads of strike teams about relevant labour protection regulations.

8.5 INSURANCE OF PERSONNEL

Possible remedies:

The insurance of Government personnel and employees of private firms under contract to Government should be the responsibility of the assisting Party which may claim reimbursement of costs from the requesting Party. The insurance of personnel of private firms acting independently would not be the responsibility of the Parties involved in the combatting operation.

8.6 CIVIL LIABILITY FOR INJURIES OR DAMAGE

Possible solution:

- Disputes over injuries or damages should be settled according to the rules of civil liability. Responsibility for the payment of costs would rest with the assisted Party except in cases off ill intent, grave fault or gross negligence.

- The requesting Party should always be informed when a dispute with a third party is to be settled before a court of law. Where this is within the territory of the assisted Party, the latter should help the assisting Party or person concerned.

8.7 ACCOMMODATION AND MEALS

Possible solution:

It should be the responsibility of the assisted Party to arrange accommodation and meals for assisting personnel when necessary or wanted.

8.8 MEDICAL TREATMENT

Possible solution:

The requesting Party should always make provision for the medical treatment of personnel of the assisting Party when necessary or wanted.

8.9 EQUIPMENT AND REPAIRS

Possible solution:

The requesting Party should help the assisting Party to the best of its ability with maintenance and repairs of equipment which cannot be carried out by personnel of the assisting Party.

8.10 PASSAGE THROUGH THE TERRITORY OF A THIRD STATE

Possible solution:

The transit State, a Contracting Party to the Helsinki Convention, shall use its best endeavours to facilitate the passage of equipment through its territory.

8.11 LEADERSHIP AND AUTONOMY OF ASSISTANCE TEAMS

Possible solution:

- The assistance teams should be lead by a servant able to sufficiently deal with authorities of the requesting Party.

- The assistance teams on land should, like strike teams at sea, be allowed to be as autonomous and self-sufficient as possible.

9. FINANCIAL ASPECTS

9.1 REIMBURSEMENT OF COSTS OF ASSISTANCE

Financial impact of assistance rendered

According to Paragraphs 1 and 2 of Regulation 9 of Annex VII of the Helsinki Convention the Contracting Parties shall bear the costs of assistance referred to in Regulation 8 of Annex VII of the Helsinki Convention and the costs of joint actions in accordance with the following formula:

a) If the action was taken by one Contracting Party at the express request of another Contracting Party, the requesting Party shall reimburse to the assisting Party the costs of the action of the assisting Party. If the request is cancelled the requesting Party shall bear the costs already incurred or committed by the assisting Party.

b) If the action was taken by a Contracting Party on its own initiative, this Party shall bear the costs of its action.

c) The principles laid down above in subparagraphs a) and b) shall apply unless the Parties concerned otherwise agree in any individual case.

Calculation of the total costs, which should be paid by the Requesting Party to the Assisting Party or Parties

According to Paragraph 3 of Regulation 9 of Annex VII of the Helsinki Convention, unless otherwise agreed, the costs of the action taken by a Contracting Party at the request of another Party shall be fairly calculated according to the law and current practice of the assisting Party concerning the reimbursement of such costs.

According to Paragraph 4 of the said Regulation the provisions of this regulation shall not be interpreted as in any way prejudicing the rights of Contracting Parties to recover from third parties the costs of actions taken to deal with pollution incidents under other applicable provisions and rules of international law and national or supra-national regulations.

As far as Regulation 9 of Annex VII of the Helsinki Convention does not already specify and besides that said above, according to HELCOM Recommendation 5/3 (1984) the Governments of the Contracting Parties to the Helsinki Convention should use the following guidelines when deciding the financial implications between the Requesting Party and the Assisting Party or Parties:

a) a fundamental principle for the *calculation of costs* which should be paid by the requesting party to the assisting country or countries is that the calculation must be based on *cost price*;

b) an assisting country shall at any time be prepared to give the requesting party a *preliminary estimation of the costs* for the assistance.

9.2 INFORMATION ON COMPENSATION FOR POLLUTION DAMAGE

Third party liability

The costs of action to deal with pollution or the threat of pollution may be recoverable on the basis of the legal third party liabilities of the owner of the ship, from where the pollution emanates/threats to emanate. Such liabilities will be insured by any prudent entity. A major part of all ships has entered *Protection and Indemnity Associations*, commonly called *P&I Clubs*. The word Club is used because the insurance they provide is arranged on a mutual basis. In the text which follows the *liability underwriter* is assumed to be a P&I Club.

The P&I Club covers only shipowner's legal liabilities in the sense of damage or compensation which the owner is legally obliged to pay to others, together with certain other losses, costs and expenses, which are specified in the terms of the insurance given to the shipowner. Shipowners are normally entitled to limit their liability under various international conventions or national law. In practice the insurance cover is mostly restricted to the limitation amount applicable to the ship.

The main job of the liability underwriter in a marine pollution emergency is to handle all claims against their members and to pay the valid ones. The first thing the P&I Club might do is put up financial security to ensure the release of the ship, in case the ship has been arrested. This is commonly done either by the claimant accepting a letter of guarantee or bond with a local bank.

The P&I Club will usually try to get independent technical assistance to advise on the type and extent of the occurred pollution, what effect it is likely to have under different scenarios, what needs to be done to abate or prevent the effects and the most efficient way of doing so. This advice will be available to the coastal State should it ask for it. The P&I Club will also be involved in the decision concerning a possible lightening of the ship to another vessel because of the liabilities the lightening ship may occur as well as in a possible wreck removal, the latter being one of the risks *P&I Clubs* insure. *So far the liability underwriter is for the coastal State one of the most important entities, on the ship owning interest's side, to discuss with in a marine pollution emergency caused by oil or even other harmful substances.*

International compensation regimes for oil pollution damage

The 1992 Civil Liability Convention and the 1992 Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage

The Director of the *International Oil Pollution Compensation Fund (1992 Fund)* should be informed immediately about an oil pollution incident which may effect the liability and

compensation for the damage on the basis of the Civil Liability Convention and the Fund Convention.

Damages resulting from oil spills from tankers are covered by an international system of compensation based on the principle of strict (i.e. "no fault") liability. Compensation is governed by two international conventions, the 1992 International Convention on Civil Liability for Oil Pollution Damage *(Civil Liability Convention, CLC)* and the 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage *(Fund Convention, FC)*. The *International Oil Pollution Fund (1992 Fund)* set up under the Fund Convention is an organisation established to administer the regime of compensation created by the Fund Convention. [1]

The CLC governs the liability of shipowners for oil pollution damage and creates a system of compulsory liability insurance. A shipowner can normally limit his liability to an amount which is linked to the tonnage of his ship. The FC is supplementary to the CLC and establishes a regime for compensating victims when the compensation under the CLC is inadequate.

Only those States which have become Parties to the CLC can become Parties to the FC. By becoming a Party to the Fund Convention, a State becomes a Member of the 1992 Fund.

The CLC applies to *oil pollution damage* resulting from spills of *persistent* oil from *tankers*. Spills of cargo or bunker oil from sea-going vessels constructed or adapted to carry oil in bulk as cargo, whether the tanker is laden or unladen, are covered by the CLC.

The CLC covers pollution damage suffered in the territory, territorial sea or exclusive economic zone (EEZ) or equivalent area of a State party to the Convention. The flag State of the tanker and the nationality of the shipowner are irrelevant for determining the scope of application.

“Pollution damage” is defined as loss or damage caused by contamination. For environmental damage (other than loss of profit from impairment of the environment) compensation is restricted, however, to costs actually incurred or to be incurred for reasonable measures to reinstate the contaminated environment. The notion of pollution damage includes measures, wherever taken, to prevent or minimise pollution damage in the territory, territorial sea or EEZ (“preventive measures”). Expenses incurred for preventive measures are recoverable even when no spill of oil occurs, provided that there was a grave and imminent threat of pollution damage.

[1] Only one Contracting Party is still party to the 1969 Civil Liability Convention and the 1971 Fund Convention, whereas all other Contracting Parties have already or will by a certain date denounce these two conventions.

Claims under CLC can be made only against the registered owner of the tanker concerned or directly against his insurer. The insurer will normally be one of the Protection and Indemnity Associations (P&I Clubs) which insure the third party liabilities of the shipowner. If the damage exceeds the owner's liability under the CLC, or the owner is financially incapable and his insurance is insufficient, or he is exempted from liability under the specific exemptions listed in the CLC, the 1992 Fund will pay the share of compensation that is not paid under CLC. To obtain compensation under the FC, claimants should submit their claims directly to the 1992 Fund.

It is in the interest of claimants to submit their claims as soon as possible after the damage has occurred. Claimants will ultimately lose their right to compensation under the FC unless they bring court action against the 1992 Fund within three years from the date on which the *damage* occurred, or make formal notification to the 1992 Fund of a court action against the shipowner or his insurer within that three-year period. Although damage may occur some time after an incident takes place, court action must in any case be brought within six years of the date of the *incident*. The same applies to claimants' right to compensation from the shipowner and his insurer under the CLC.

Compensation can be paid to a claimant only to the extent that his claim is justified and meets the criteria laid down in the FC. A claimant is therefore required to prove his claim by producing explanatory notes, invoices, receipts and other documents to support the claim. According to the 1992 Fund's "Claims Manual" (latest version June 2000 and obtainable on www.iopcfund.org) each claim should contain at least the following basic information: name and address of the claimant, identity of the ship involved, the date, place and specific details of the incident, the type of pollution damage sustained and the amount of compensation claimed. The 1992 Fund's "Claims Manual" further gives directions as to how to itemise claims for clean-up operations and preventive measures, claims for the cost of measures to prevent pure economic loss, claims for consequential loss and pure economic loss as well as claims for environmental damage.

The 1992 Fund will cooperate with the insurer of the shipowner's third party liability (normally one of the P&I Clubs) in the settlement of claims. The investigation of an incident and the assessment of the damage will usually be done jointly by the P&I Club and the 1992 Fund.

The 1992 Fund, like P&I Clubs, endeavours to settle claims out of court. If an agreement cannot be reached, the claimant may pursue his claim before the court of the State where the damage occurred, if that State is a Party to the FC. Claimants should bring their claims against the 1992 Fund well before the expiry of the period mentioned above, in order to safeguard the possibility of suing the 1992 Fund for compensation, if the claimant and the 1992 Fund cannot agree on an amicable settlement of the claim.

In order for a claim to be accepted, it has to be proved that the claim is based on a *real expense* actually incurred, that there was a *link* between the expense and the incident and that the expense was made for *reasonable purposes*. Compensation is paid for expenses incurred for

clean-up operations at sea or *on the shore*, for *preventive measures, consequential loss and pure economic loss, measures to prevent pure economic loss and environmental damage*.

The costs may relate for instance to the deployment of vessels, salaries of crews and other personnel, use of booms, recovery equipment and other material, sealing of fractures in a grounded vessel to prevent oil from escaping, etc. However, the definition only covers expenses for *reasonable measures*. Expenses for preventive measures are recoverable even if no spill of oil occurs, provided there was a grave and imminent threat of pollution. Losses which do *not result directly* from an incident are not compensated.

Further information about the Conventions and claims is available in the publications by the 1992 Fund, which are obtainable on their web-site: www.iopcfund.org.

Other international conventions dealing with liability and compensation resulting from maritime casualties

- Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, 1971

- International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances (HNS) by Sea (not yet in force)

The HNS Convention will make it possible to pay out compensation to victims of accidents involving HNS, such as chemicals. The HNS Convention is based on the same two-tier approach as the CLC and FC (see above).

- International Convention on Civil Liability for Bunker Oil Pollution Damage (not yet in force)

The Bunker Convention will provide a liability and compensation regime for pollution damage caused by bunker oil (excluding the damages covered by the CLC and FC regime, see above).

- Draft Convention on Wreck Removal (to be considered by a Diplomatic Conference during the 2004-2005 biennium)

The Wreck Removal Convention is intended to provide international rules on the rights and obligations of states and shipowners in dealing with wrecks and drifting or sunken cargo which may pose a hazard to navigation and/or pose a threat to the marine environment. The Convention is intended to clarify rights and obligations regarding the identification, reporting, locating and removal of hazardous wrecks, in particular those found beyond territorial waters.

Awaiting the entry into force of the 1992 HNS Convention, the Bunker and the Wreck Removal Conventions, damage, ensued from pollution by harmful substances, other than oil as well as oil pollution from vessels other than oil tankers, has to be settled otherwise.

Compensation for pollution damage not covered by international conventions

Claims against polluters may be successful on the basis of the coverage of vessels' insurances for damages of third parties (P&I Clubs) and/or on the national law concerned. Whether such ships are insured by P&I Clubs or not, compensation payable can be limited under the relevant law, such as the *Convention on Limitation of Liability for Maritime Claims, 1976 as last amended in 1996* (the 1996 Protocol had as of 1 January 2001 not yet entered into force) *(Limitation Convention)*.

9.3 CALCULATION FOR REIMBURSEMENT AND CLAIM FOR COMPENSATION

Especially in cases where a joint operation has been conducted in one country's territory, a claim can be brought against the polluter for all the costs of action, including costs of the assistance of other countries. Before claiming, the Lead Country shall pay the costs of that assistance. Each claimant has to prove that his claim is justified and meets the general criteria. For that he needs all relevant reports and records, explanatory notes, invoices, receipts and other documents to support the claim. Therefore, the documentation for the calculation of costs to be presented by any assisting party to the Lead Country for a reimbursement shall include such documents, too. Assisting parties should be able, even later, to give all further information which the handling of the Lead Country's claim may require. The Lead Country shall present basic particulars, like the statement of the reasons for actions, evidence, events etc.

In cases where actions have taken place in international waters or partly even in response regions of other countries, the countries involved may agree otherwise how to take care of the costs and claiming for them in the most efficient way.

9.4 CALCULATION OF COSTS FOR ASSISTANCE RENDERED

The calculation of costs for assistance rendered is normally based on national regulations. If specific national regulations do not exist, the following formula should be used:

A. Ship's cost (rent of a ship): Yearly maintenance and capital (write off and capital interest) costs.
B. Fuel, lubricants and hydraulics. Consumption of oil products.
C. Labour costs. Salaries and fees concerning ship crews and duty officers.
D. Other: Lost material, rent of special equipment, repairing, special cleaning, etc.

Re. A: The ship's cost is based on the hours the ship has been used. The hours are calculated from departure base port to arrival base port. For a possible standby in other ports during operation capital costs is charged, but normally no maintenance costs.

The following formula can be used in calculating ship's rate (cost per hour). Because costs of the year of an incident are not known before the end of the year and may include some rare main investments or repairs, the ship's actual fair rate may be the previous year's rate or an average of the ship's rates for the last three years, converted to the concerned year's price index:

$$\text{Cost per hour (ship's rate)} = \frac{a + b + c}{24 \times \text{days}}$$

Explanation:

"a" = Yearly maintenance and service cost. Expenses for running the ship, like year docking, overhauling engines and hull, paintings, renewing worn parts and other normal maintenance and service. That does not include expenses of fuel and other oil products and expenses of the ship's crew.

"b+c" = Capital costs are the sum of the write-off capital annually and the remaining capital's annual interest. Either the write-off in the balance or the write-off remaining values annually methods can be used. Remaining values-method gives higher costs at first and lower later and is more difficult to calculate than the write-off in the balance method. In the following the write-off in the balance - method is presented.

"b" = Write-off in the balance. The lifetime of the vessel depends generally on its size. For boats under 18 meters it is about 15 years, for ships under 30 meters 20 years and for bigger ones 25 years. Therefore "b" is equal to one/lifetime of the day's price of the ship. Today's price of the vessel is calculated from its delivery costs, like building or purchasing costs, and technical investments to the ship after its delivery, all converted to the concerned year's price index. Possible scrap value at the end of the use time (for instance 5%) may also be considered.

"c" = Interest of capital. The amount of the capital the vessel presents is its remaining value. In the write-off in the balance-method the today-price of the vessel has to be reduced with (100/lifetime) % per year. The result has to be multiplied with the appropriate government's rate of interest (6-9 %).

"24xdays" = Amount of days when the ship will be ready for operations. For getting the cost per hour the result has to be divided with 24.

Re. B: Consumption of oil products is calculated by gauges on board the ships.

Re. C: Only all real labour expenses are charged. Besides normal wages and sea service compensations, also the overtime working compensations, which shall be verified by proper record keeping, are payable. Working on a voluntary basis in very hard tasks may be rewarded and such rewards can be claimed too, if justified and properly recorded.

To find out the total expenses caused by state employees to the state, one must add some percentages to salaries actually paid. That addition depends on legislation for employment and conditions of work and employment. They may include all other direct costs from employment, like salary during annual leave, extra money paid during annual leave, salary during sick leave, a social insurance fee and costs of retirement allowance. Total percentage for that varies and may be up to 70%. The salaries and fees are without any general overhead.

Labour costs include costs of combatting personnel, such as crews of vessels and other strike teams. To simplify calculations the salary and fee may be estimated on the basis of an average of the entire crew's salaries and fees. Labour costs of administrative personnel in duty for the incident may also be included, when properly recorded and justified. No other administration fee should be included.

Re. D: "Other" includes expenses like:

- lost material: value of redelivery,
- rent of special equipment: wearing of it (for instance rent of oil booms 2% of purchase price per day in real use or 1% for a skimmer) or a rent calculated by another way,
- repairing: full price if not fault by own neglect,
- cleaning costs of equipment and vessels,
- handling costs of recovered oil and oily wastes,
- cost of the use of telecommunication, etc.

10. EXERCISES AND RELATED GUIDELINES

10.1 TYPES OF EXERCISES

Under the framework of the Helsinki Convention the following types of combatting exercises have been agreed upon:

- Synthetic Exercise (BALEX ALPHA)
- Alarm Exercise (BALEX BRAVO)
- Equipment Exercise (BALEX CHARLIE)
- Operational Exercise (BALEX DELTA)
- State-of-the-art Exercise (BALEX ECHO)

Decisions on the yearly exercise programme including the types of exercises, aims and goals for the exercises, time for the execution and appointment of Lead Countries are taken during the meetings of the Response Group (cf. HELCOM SEA 1/2000, 5/3, Paragraph 4.48).

BALEX BRAVO, CHARLIE, DELTA and ECHO can be executed independently or in combination with each other.

Synthetic Exercise (BALEX ALPHA)

This exercise type is a "paper exercise", the aim of which is to create a base for discussion on matters relating to organization, communication, logistics, etc. in combatting actions involving two or more Baltic Sea Countries.

The exercise will normally take place during the meetings of the Response Group.

The outline of the exercise is preplanned in such a way that the players will be presented with a scenario of a pollution incident giving such facts of the incident that most probably would be at hand in the initial phase.

The situation in the initial phase will be followed by presentations of the situation as it has developed at certain chosen later stages.

After each presentation the players are given the necessary time to consider their national follow-up action in relation to the incident situation.

The national follow-up actions are then presented and discussed before a presentation of the next following chosen stages of the incident situation will take place.

Alarm Exercise (BALEX BRAVO)

The aim of this exercise type is to test the agreed procedures and lines of communication for reporting, requesting and providing assistance, and to get a picture of the current response readiness of the Contracting Parties when called to assist.

The exercise further aims at familiarizing the personnel with the use and national handling of the adopted POLREP reporting form.

It is not the intention with this exercise that combatting equipment and its handling personnel should be activated.

When receiving an exercise POLREP (POLWARN) the participating Contracting Parties should record the time of receipt, time of transmission to the responsible national authority and time of the receipt of POLREP (POLWARN) by the person responsible for initiating further national action.

When receiving an exercise POLREP (POLINF/POLFAC) in addition to the times recorded as for POLREP (POLWARN) the participating Contracting Parties should make a realistic evaluation of the types and the amount of equipment and personnel at their disposal for rendering assistance called for, as well as the time for its arrival at the scene of the accident.

After the termination of each exercise the participating Contracting Parties shall submit a report containing the above mentioned times and evaluations to the Lead Country. The Lead Country should compile this information in a report, for discussion at the following meeting of the Response Group.

The BALEX BRAVO is executed without notice but within a specified period of time.

The BALEX BRAVO can be carried out in turn between two or more Contracting Parties, and the arrangement and the initiation of the exercise are undertaken by representatives of the Parties involved and assisted by the Secretariat, if needed.

Equipment Exercise (BALEX CHARLIE)

The purpose of this exercise is to test the co-operation between the combatting units of the Contracting Parties with respect to both communication and equipment. Involvement of personnel - except those needed for running the equipment - should be very restricted.

The BALEX CHARLIE is carried out between two or more Contracting Parties with bordering Response Regions.

Notice as to the time and event is to be given well in advance of the exercise, and the Contracting Parties not taking part in the exercise and the Secretariat shall be invited to send observers to the exercise.

When planning the date for the execution of the exercise a back-up date should be held in reserve. The participating Parties must be informed as soon as possible and at least three days in advance if the exercise has to be executed on the back-up date or altogether cancelled.

Reports on the exercise should be sent from the Lead Country to the Secretariat for further circulation to other Contracting Parties in order to have the report presented and discussed at the following meeting of the Sea-based Pollution Group.

The BALEX CHARLIE is arranged and executed after direct consultation between the Contracting Parties involved.

Operational Exercise (BALEX DELTA)

The aim of this exercise type is partly to test the alarm procedure, the response capability, and the response time of the Contracting Parties, partly to test and train the staff functions and the co-operation between combatting units (including the combatting equipment) of the Contracting Parties.

The BALEX DELTA is carried out annually, the execution of exercises rotating between the northern and the southern part of the Baltic Sea Area. At the meetings of the Response Group it is decided who should arrange the coming years exercises and what should be the aims of these exercises.

The Lead Country has the overall responsibility to plan and execute the exercise (see further 10.5, section 1).

A report, evaluating the results of the exercise should be send to the Secretariat for distribution to the Contracting Parties in order to have the report presented and discussed at the following meeting of the Response Group (see further 10.5, section 2).

While participation in the exercise is voluntary, it is recommended that at least the neighbouring countries participate.

State-of-the-art Exercise (BALEX ECHO)

The aim of this exercise is to demonstrate the state-of-the-art of a specific topic, e.g., a type of equipment, a response method, means of communication or scientific tests. Traditional operational combatting activities will not form a part of this type of exercise.

As the aim of BALEX ECHO is to demonstrate the-state-of-the-art, great emphasis should be given to inviting relevant observers from the Contracting Parties.

The exercise should be followed by a "hot wash-up" in order to benefit from the remarks from

the observers. The Lead Country should send a report of the exercise to the Secretariat for further distribution to the Contracting Parties in order to have the report presented and discussed at the following meeting of the Response Group.

10.2 PROCEDURES FOR THE EXERCISES

To identify exercise traffic and to avoid conflict with exercises undertaken within other agreements, the text of all messages (both to and from the Lead Country) shall begin with the words:

"EXERCISE HELCOM"

All messages shall end with the words:

"EXERCISE-EXERCISE-EXERCISE"

At the end of each exercise the Lead Country shall send a final "End of exercise" message to all Participants.

10.3 EXERCISE REPORT

After an exercise the Lead Country shall prepare a brief report (for reports from BALEX DELTA Exercises, see 10.5, section 2).

The report should, as a minimum, cover the following items:

(1) Preparation of the exercise
- a short description of how the exercise was prepared and relevant references

(2) Implementation of the exercise
- date and period of exercise,
- a brief description of how the exercise was initiated

(3) Participating Contracting Parties
- names of participating Parties with a description of participating units and items from each Party

(4) Running and finalization of exercise
Under this heading a brief description of following items should be given:
- scenario
- command
- communications
- finalization of exercise

(5) Comments of the Participating Parties
A brief summary of comments received from each participating Party. Only comments on important matters should be mentioned.

(6) Conclusion
- a general conclusion from the Lead Country's point of view on lessons learned
- suggestions and recommendations on how to improve exercises in the future.

Tables, statistics or figures can be added as necessary under each item as annexes at the end of the heading.

10.4 CHECKLIST OF ADMINISTRATIVE AND ORGANIZATIONAL PROBLEMS WHICH COULD ARISE IN AN OPERATIONAL EXERCISE (BALEX CHARLIE OR DELTA)

In general it is up to each participating Party to take care of all formalities itself. But it is advisable that the Lead Country undertakes to make precautions in order to facilitate the granting of all clearance and permissions required.

This checklist is to help the Lead Country arranging an operational exercise and the participating Parties not to forget issues of importance:

- diplomatic clearance
- customs questions
- conditions of work
- insurance of personnel
- civil liability for injuries or damage
- accommodation and meals
- medical treatment
- equipment and repairs
- report to the meeting of the Sea-based Pollution Group
- general program well in advance, including:

* exercise condition	* time zone
* briefing/debriefing	* exercise command
* operational command	* liaison officer
* participating units	* communication
* timetable	* recommended charts
* pilot regulation	* required diplomatic clearance
* moorage	* hotel reservation
* transports	* observers
* social events	* information service

10.5 PLANNING AND EVALUATION OF BALEX DELTA EXERCISES

(1) PLANNING

First announcement and invitation to participation should be sent to the Secretariat for distribution to the Contracting Parties six months in advance of the exercise. This first announcement should:

- inform on the aim, the date, including a back-up date, and place of the exercise; and
- call for participation of ships and observers.

Announcements of participation should be made to the Lead Country four months in advance of the exercise.

Having received the announcements of participation the Lead Country should send out practical information about the exercise. Examples of such information is given in section 10.4. This information should not include details of the exercise scenario.

In general it is up to the Lead Country to plan the exercise scenario. An Exercise Evaluation Team (EET) shall, however, be established, to enable beforehand comments on the exercise scenario, and thus ensure the best benefits of the scheduled exercise. The exercise scenario shall be sent in due time to the members of the EET to enable them to comment thereupon.

The EET normally consists of three members, of which one is from the Lead Country, one from the Contracting Party who arranged the previous exercise, and one from the Contracting Party who will arrange the next exercise.

Although the aim of a BALEX DELTA Exercise is to check and train the operational system as a whole, efforts should also be made to change the tasks of the participating units during the exercise, in order for personnel to gain as much experience as possible from the exercise.

The participating Parties must be informed as soon as possible and at least three days in advance if the exercise has to be executed on the back-up date or altogether cancelled.

(2) EVALUATION

The EET shall, in order to strengthen the operational co-operation between the Contracting Parties, do an unbiased evaluation of the exercise.

This evaluation is to be conducted in two steps; as an intermediate evaluation and as a final evaluation.

For the intermediate evaluation the tasks of the EET are:

- to be present during the exercise; and

- to give an oral presentation of the findings and a preliminary evaluation of the exercise to the participants immediately after the exercise (at the debriefing).

For the final evaluation the task of the EET is:

- to submit a written report of the final evaluation including lessons learnt and proposals for future similar activities to the next meeting of the Response Group.

The members of the EET decide between themselves their individual tasks and their geographical location(s) during the execution of the exercise.

AN ANALYSIS OF THE EXPERIENCE AND POSSIBILITIES TO USE VARIOUS MATERIALS FOR SIMULATING THE OIL SPILL DURING THE EXERCISES

MATERIAL	VISIBILITY	BEHAVIOUR	OTHER ADVANTAGES	OTHER DISADVANTAGES
1) Foam **1. Light (high expansion)** **2. Medium (medium expansion)** **3. Heavy (low expansion)** **4. Training foams**	Excellent	Drifts too much with the wind.	Relatively cheap, needs no collection. b) Easy to deploy. c) Easy to deploy. d) Easy to deploy.	Lighter foams disappear too soon. All foam types except training foams are more or less poisonous. a) Difficult to deploy especially in windy conditions due to the lightness.
2) Peat	Poor - moderate	Drifts mainly with the wind.	Easy to deploy, relatively cheap, environmentally friendly.	Needs to be collected.
3) Vegetable oils, general **1. Canola oil (from rape seed)**	Poor – moderate No experience	Simulates the drifting of mineral oils well. Simulates crude oil especially well when used in water-in-oil emulsion form.	More environmentally friendly than mineral oils. Highly biodegradable, low toxicity.	Needs to be collected. Some vegetable oils are harmful to the nature, stick to the fishing nets, birds, etc. Sometimes a small amount of mineral oil must be added to make the oil visible. Reports about environmental risks of using Canola oil are contradictory.
4) Chemical agents like Rhodamine, etc.	Moderate	Simulates sinking oil and oil that spreads to the whole water column, like orimulsion, well.	The volume of the needed agent is small, needs not to be collected.	Perfect monitoring of the slick needs special equipment. Rhodamine can be used also together with peat, foam, etc. which then simulates the drifting of floating oil.
5) Pop Corn (unsalted)	Excellent	Drifts mainly with the wind.	Largely environmentally friendly.	The use of Pop Corn can be ethically doubtful (food). It is oxygen-consuming material.
6) Paraffin balls	Poor - moderate. In darkness easy to see with searchlight.	Simulates the drifting of mineral oils well.		Needs to be collected and can create mechanical damages in the skimmers. Rather expensive.
7) Paper/carton pieces	Good	Simulates the drifting of mineral oils on water surface perfectly.	Cheap, easy to deploy, environmentally friendly.	Needs to be collected, may sink.
8) Drifters	Excellent	Simulates the drift of the slick well.	Can be used several times. If drifters are equipped with GPS and radio links, the true position of the slick is easily monitored.	Skimmers cannot be tested when using drifters and if real spreading of the oil is simulated, large number of drifters is needed. Modern (GPS + radio link) drifters are expensive.

11. OILED WILDLIFE RESPONSE

1. GENERAL PRINCIPLES

General principles of good practice with regards to oiled wildlife response include but are not limited to the following:

- Ensuring health and safety of responders and general public are always first priority of response
- Objectives and strategy are clearly defined at the start of the response by being an organic part of pre-spill planning
- National legislation applies at all times
- Foreign response groups can only work under licence and supervision provided by national authorities
- Criteria and procedures for euthanasia and release, that are indicated also in the oiled wildlife response plan, are set by national authorities and can only be applied under their supervision
- Activities always aim at meeting highest standards of animal welfare. Rehabilitation is only conducted if adequate set up can be provided, with reasonable expectation of minimised suffering and maximised post-release survival of treated animals. Euthanasia is included as a mean of diminishing suffering and to replace rehabilitation where needed.
- It is clearly defined how the contributions (if any) of volunteers and volunteer groups will be integrated into the response activity, and how these contributions will be coordinated and controlled.

2. HEALTH AND SAFETY STANDARDS

Foreign groups and volunteers will have to comply with the standards for health and safety and environment (HSE) of the Requesting Party. These standards will be made available to invited groups in a communicable format, e.g. translated into English if possible. The adoption of a common set of HSE standards specifically for oiled wildlife response in the HELCOM region would truly facilitate the smooth integration of expertise from the region. The HSE issues connected with an oiled wildlife response are explained in the box below.

Towards HSE standards for oiled wildlife response in the HELCOM area

Oiled wildlife responders typically are facing two category of HSE issues while responding to oiled wildlife:

1. HSE issues related to working in an oil polluted environment
2. HSE issues related to working with oiled wildlife both in the field and in facilities

With regards to onshore wildlife response (the collection of live and dead animals), and the specific requirements for dealing with oil pollution, the general HSE standards of oil spill response will apply. This includes protocols and training with regards to

- the cautious behaviour in natural hazardous areas,
- the use of adequate personal protective equipment (ppe) when entering and working in polluted zones,
- minimising polluted waste and secondary pollution

With regards to dealing with live oiled animals, additional health and safety standards must apply. These include protocols and training with regards to 5 basic principles (IPIECA, 2004):

- the maintenance of safe working conditions and procedures
- the understanding of occupational health
- an understanding of potential hazards of working with oiled wildlife
- the wearing of adequate personal protective equipment (ppe)
- the practice of good personal hygiene

3. Banding and post release monitoring

An attempt to rehabilitate oiled animals should always be undertaken with the aim to release the cleaned and rehabilitated animals with a high probability that they will survive and reproduce as if they had never been oiled. The use of internationally recommended rehabilitation protocols provides a proper basis for this. Nevertheless, the ultimate evidence of the rehabilitation success must come from scientific observations that are made on the breeding colonies. Although the banding of successfully rehabilitated and released animals is part of international good practice, it is still hard to collect the necessary evidence from field observation programmes that released animals actually have rejoined their natural (breeding) population. Rings that are provided to the rehabilitated birds before their release cannot easily be read at sea or at breeding colonies. Therefore most registered readings come from dead seabirds that have washed ashore some time after their release. This tends to give an unfavourable bias to the perceived success rate of rehabilitation programmes.

The absence of evidence from breeding colonies does not disqualify rehabilitation as a useful approach in oiled wildlife response, but it is clear that more intensive research programmes are needed to allow better scientific assessment of post release survival in relation to rehabilitation methodologies. Possible roads for new research programmes in the field of oiled wildlife response include e.g. the use of colour rings or radiotags for rehabilitated birds, better scientific documentation of the development and use of rehabilitation methodologies and a more structural reporting of ring observations to rehabilitation centres. Especially larger incidents provide interesting opportunities for post-release studies. These should be integrated into the response plan, especially into the release protocols. In this way information on the survival of relatively large numbers of rehabilitated birds can be obtained.

HELCOM strongly recommends the banding or radio tagging of rehabilitated animals according to international standards and encourages research projects and stronger efforts to quantify and document post release survival of rehabilitated animals.

4. CUSTOMS AND BORDER CROSSING

With regards to wildlife response there are two main areas in which customs and border crossings need to be considered:

- The entrance of invited responders and/or equipment into a country
- The transport of oil affected animals across borders in order to have them rehabilitated in a neighbouring country

The first area is already covered by Chapter 4 and 8 of the HELCOM Respone Manual.

The international transport of oil affected animals could be considered under the following circumstances:

- A relatively large incident has affected two or more neighbouring countries. In the coordinated international response the countries in question share their resources and the optimal use of these facilities may require that animals are transported to a facility abroad.
- A relatively small oil incident has affected a country with only limited facilities. It may be more cost-effective to send a limited number of animals to a permanent facility abroad instead of inviting foreign expertise and equipment into the country in question and set up a temporary facility.

The transport of marine animals normally needs a permit from both the countries in question. Such a permit could be facilitated by an enhanced procedure that can be followed as part of the national response plan and bi- and multilateral agreements between HELCOM countries that have been made in advance.

5. COMMAND STRUCTURE AND OPERATIONAL MANAGEMENT

Requesting Party provides a clear command structure for oiled wildlife response as an integrated part of the overall oil spill response command structure (see figures 1 and 2). Assisting Party will be informed about this structure and given a clear role and responsibility as part of that command system.

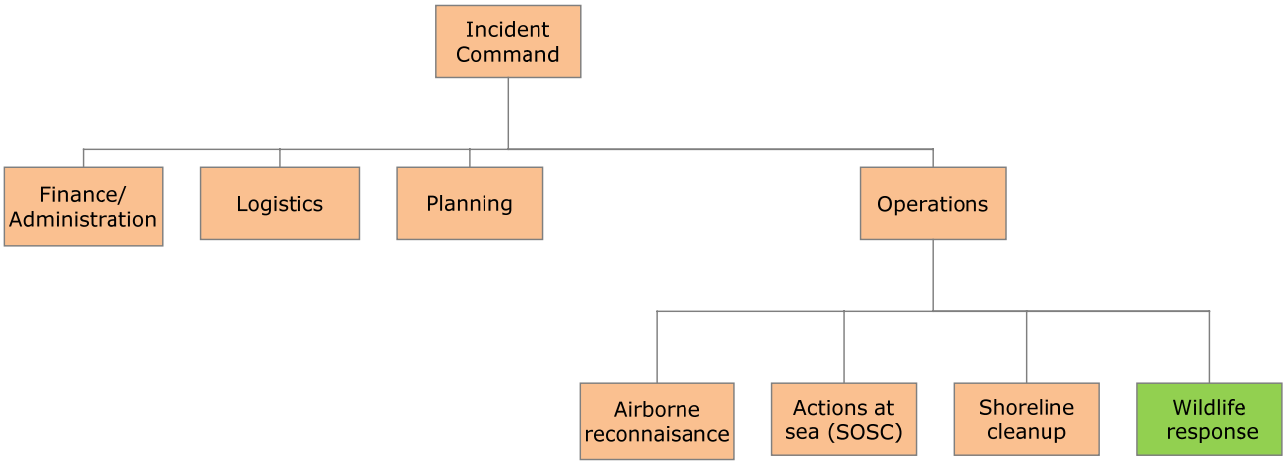


Figure 1: Wildlife response is often integrated into the overall incident command system as part of "Operations", but the actual organisation structure will differ from country to country.

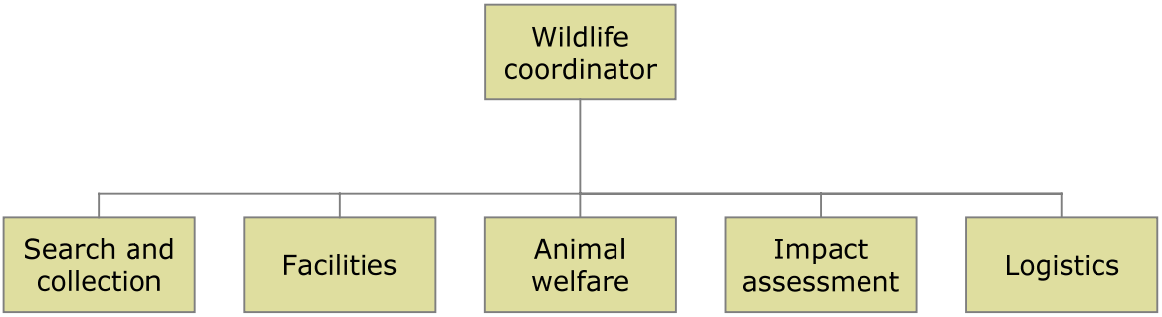


Figure 2: Example of a simple oiled wildlife response organisation chart. The contributions of foreign experts are often including the set up and running of a rehabilitation facility, impact assessment, search and collection, and/or management coaching. Groups or individual experts can be integrated into the organisation chart accordingly.

Assisting Party is expected to have its own command structure, including a mission leader with controlling power over the group. The Assisting Party will be asked to provide the names and the affiliation of the experts in the proposed team, as well as their internal command structure, the expertise they provide and their operational needs if integrated into the national response. The mission leader will liaise directly with the national wildlife response coordinator.

6. Operational communication with Assisting Party

Assisting Party will be kept informed at all times by a liaison officer who has a direct link into the national command structure and is mandated to deal with the foreign experts. Requesting Party provides all means feasible to maximise the contribution that the foreign experts could bring to the success of the national response. Requesting Party identifies a wildlife response centre (WRC) where all relevant information is brought together. Mission leaser of Assisting Party will have access to this wildlife response centre and its information.

7. Financial aspects

The general rules for reimbursement of costs of assistance are included in Chapter 9 of the Manual.

Note: These rules will be applicable also to oiled wildlife response operations and no changes will be needed in the Manual in this respect if the legal basis of the Convention is extended to deal with oiled wildlife response (see section 3 on requesting and providing assistance).

The probability of a successful claim can be maximised if the wildlife response is carried out in organised and coordinated manner, following an agreed plan, involving trained expertise and applying proven methodologies and acknowledged protocols. The Contracting Parties are recommended to follow the IOPC Fund Claims Manual (pg 23) with regard to the claims of costs of oiled wildlife response.

8. EXERCISES

Oiled wildlife response exercising can be integrated, where applicable, as part of the existing HELCOM exercise structures described in Chapter 10 of the Manual (ALPHA, BRAVO, CHARLIE, DELTA, ECHO).

Additionally, each Contracting Party is encouraged to invite observers of the other Contracting Parties to participate in their national exercises.

Note: For that purpose no additional changes in the Manual are needed. HELCOM RESPONSE 10/2008 already recommended the Contracting Parties to include shoreline and oiled wildlife response in national and international response exercises.

9. INTERNATIONAL GUIDELINES RELATED AND AVAILABLE

HELCOM Contracting Parties jointly recognize and agree on the use of the following guidelines and documents to be applied in preparedness and response in the HELCOM area:

- Guide to Oiled Wildlife Response Planning (IPIECA, 2004)[1]
- Handbook on good practices for the rehabilitation of oiled birds in the aftermath of an oil spill incident (Anon. 2007) [2]
- Handbook on Wildlife Impact Assessment (Anon. 2007)
- **Handbook Impact Assessment Seabirds** [3]
- **A European Oiled Wildlife Response Plan**[4]
- IOPC Funds Claim Manual[5]
- Various internationally recommended wildlife rehabilitation protocols[6]

NB: Internationally promoted rehabilitation protocols are science-based and well documented procedures and methodologies that aim to restore an animal's capacity to survive and reproduce after release as if it had not been oiled at all.

Examples of oiled bird protocols that are widely accepted include:

- The Oiled Wildlife Care Network protocols
- The IBRRC/IFAW protocols
- Derivates from these protocols (e.g. the Handbook Oiled Wildlife, published in Australia)
- The SRRC Pieterburen protocols

1 http://www.oiledwildlife.eu/?q=node/243

2 http://www.oiledwildlife.eu/files/Rehabilitation%20of%20Oiled%20Birds%20in%20the%20aftermath%20of%20an%20Oil%20Spill%20Incident%20-Handbook-2007.pdf

3 http://www.oiledwildlife.eu/?q=node/243

4 http://www.oiledwildlife.eu/?q=node/211

5 downloadable from http://www.iopcfunds.org/publications.htm

6 The protocols mentioned are not downloadable, but often can be provided on request by the organisation that developed and owns it

12. THE HELSINKI CONVENTION

12.1 CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA, 1992 (EXTRACT)

Article 2
Definitions

For the purposes of this Convention:

1. "Pollution" means introduction by man, directly or indirectly, of substances or energy into the sea, including estuaries, which are liable to create hazards to human health, to harm living resources and marine ecosystems, to cause hindrance to legitimate uses of the sea including fishing, to impair the quality for use of sea water, and to lead to a reduction of amenities;

6. "Oil" means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products;

7. "Harmful substance" means any substance, which, if introduced into the sea, is liable to cause pollution;

9. "Pollution incident" means an occurrence or series of occurrences having the same origin, which results or may result in a discharge of oil or other harmful substances and which poses or may pose a threat to the marine environment of the Baltic Sea or to the coastline or related interests of one or more Contracting Parties, and which requires emergency actions or other immediate response;

Article 11
Prevention of dumping

1. The Contracting Parties shall, subject to exemptions set forth in paragraphs 2 and 4 of this Article, prohibit dumping in the Baltic Sea Area.

2. Dumping of dredged material shall be subject to a prior special permit issued by the appropriate national authority in accordance with the provisions of Annex V.

3. Each Contracting Party undertakes to ensure compliance with the provisions of this Article by ships and aircraft:

a) registered in its territory or flying its flag;

b) loading, within its territory or territorial sea, matter which is to be dumped; or
c) believed to be engaged in dumping within its internal waters and territorial sea.

4. The provisions of this Article shall not apply when the safety of human life or of a ship or aircraft at sea is threatened by the complete destruction or total loss of the ship or aircraft, or in any case which constitutes a danger to human life, if dumping appears to be the only way of averting the threat and if there is every probability that the damage consequent upon such dumping will be less than would otherwise occur. Such dumping shall be so conducted as to minimize the likelihood of damage to human or marine life.

5. Dumping made under the provisions of paragraph 4 of this Article shall be reported and dealt with in accordance with Annex VII and shall be reported forthwith to the Commission in accordance with the provisions of Regulation 4 of Annex V.

6. In case of dumping suspected to be in contravention of the provisions of this Article the Contracting Parties shall co-operate in investigating the matter in accordance with Regulation 2 of Annex IV.

Article 12
Exploration and exploitation of the seabed and its subsoil

1. Each Contracting Party shall take all measures in order to prevent pollution of the marine environment of the Baltic Sea Area resulting from exploration or exploitation of its part of the seabed and the subsoil thereof or from any associated activities thereon as well as to ensure that adequate preparedness is maintained for immediate response actions against pollution incidents caused by such activities.

2. In order to prevent and eliminate pollution from such activities the Contracting Parties undertake to implement the procedures and measures set out in Annex VI, as far as they are applicable.

Article 13
Notification and consultation on pollution incidents

1. Whenever a pollution incident in the territory of a Contracting Party is likely to cause pollution to the marine environment of the Baltic Sea Area outside its territory and adjacent maritime area in which it exercises sovereign rights and jurisdiction according to international law, this Contracting Party shall notify without delay such Contracting Parties whose interests are affected or likely to be affected.

2. Whenever deemed necessary by the Contracting Parties referred to in paragraph 1, consultations should take place with a view to preventing, reducing and controlling such pollution.

3. Paragraphs 1 and 2 shall also apply in cases where a Contracting Party has sustained such pollution from the territory of a third state.

Article 14

Co-operation in combatting marine pollution

The Contracting Parties shall individually and jointly take, as set out in Annex VII, all appropriate measures to maintain adequate ability and to respond to pollution incidents in order to eliminate or minimize the consequences of these incidents to the marine environment of the Baltic Sea Area.

ANNEX VI
1992 Helsinki Convention

PREVENTION OF POLLUTION FROM OFFSHORE ACTIVITIES

Regulation 7; Contingency planning

Each offshore unit shall have a pollution emergency plan approved in accordance with the procedure established by the appropriate national authority. The plan shall contain information on alarm and communication systems, organization of response measures, a list of prepositioned equipment and a description of the measures to be taken in different types of pollution incidents.

ANNEX VII
1992 Helsinki Convention

RESPONSE TO POLLUTION INCIDENTS

Regulation 1; General Provisions

1. The Contracting Parties undertake to maintain the ability to respond to pollution incidents threatening the marine environment of the Baltic Sea Area. This ability shall include adequate equipment, ships and manpower prepared for operations in coastal waters as well as on the high sea.

2. a) In addition to the incidents referred to in Article 13 the Contracting Party shall also notify without delay those pollution incidents occurring within its response region, which affect or are likely to affect the interests of other Contracting Parties.

   b) In the event of a significant pollution incident other Contracting Parties and the Commission shall also be informed as soon as possible.

3. The Contracting Parties agree that subject to their capabilities and the availability of relevant resources, they shall co-operate in responding to pollution incidents when the severity of such incidents so justify.

4. In addition the Contracting Parties shall take other measures to:

   a) conduct regular surveillance outside their coastlines; and

   b) otherwise co-operate and exchange information with other Contracting Parties in order to improve the ability to respond to pollution incidents.

Regulation 2; Contingency Planning

Each Contracting Party shall draw up a national contingency plan and in co-operation with other Contracting Parties, as appropriate, bilateral or multilateral plans for a joint response to pollution incidents.

Regulation 3; Surveillance

1. In order to prevent violations of the existing regulations on prevention of pollution from ships the Contracting Parties shall develop and apply individually or in co-operation, surveillance activities covering the Baltic Sea Area in order to spot and monitor oil and other substances released into the sea.

2. The Contracting Parties shall undertake appropriate measures to conduct the surveillance referred to in Paragraph 1. by using, inter alia, airborne surveillance equipped with remote sensing systems.

Regulation 4; Response Regions

The Contracting Parties shall as soon as possible agree bilaterally or multilaterally on those regions of the Baltic Sea Area in which they shall conduct surveillance activities and take action to respond whenever a significant pollution incident has occurred or is likely to occur. Such agreements shall not prejudice any other agreements concluded between Contracting Parties concerning the same subject. Neighboring States shall ensure the harmonization of different agreements. Contracting Parties shall inform other Contracting Parties and the Commission about such agreements.

Regulation 5; Reporting Procedure

1. a) Each Contracting Party shall require masters or other persons having charge of ships flying its flag to report without delay any event on their ship involving a discharge or probable discharge of oil or other harmful substances.

   b) The report shall be made to the nearest coastal state and in accordance with the provisions of Article 8 and Protocol I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 related thereto (MARPOL 73/78).

   c) The Contracting Parties shall request masters or other persons having charge of ships and pilots of aircraft to report without delay and in accordance with this system on significant spillages of oil or other harmful substances observed at sea. Such reports should as far as possible contain the following data: time, position, wind and sea conditions, and kind, extent and probable source of the spill observed.

2. The provisions of paragraph 1. b) shall also be applied with regard to dumping made under the provisions of Article 11, paragraph 4 of this Convention.

Regulation 6; Emergency Measures on Board Ships

1. Each Contracting Party shall require that ships entitled to fly its flag have on board a shipboard oil pollution emergency plan as required by and in accordance with the provisions of MARPOL 73/78.

2. Each Contracting Party shall request masters of ships flying its flag or, in case of fixed or floating platforms operating under its jurisdiction, the persons having charge of platforms to provide, in case of a pollution incident and on request by the proper authorities, such detailed information about the ship and its cargo or in case of platform its production which is relevant

to actions for preventing or responding to pollution of the sea, and to co-operate with these authorities.

Regulation 7; Response Measures

1. The Contracting Party shall, when a pollution incident occurs in its response region, make the necessary assessments of the situation and take adequate response action in order to avoid or minimize subsequent pollution effects.

2. a) The Contracting Parties shall, subject to sub-paragraph b), use mechanical means to respond to pollution incidents.

   b) Chemical agents may be used only in exceptional cases and after authorization, in each individual case, by the appropriate national authority.

3. When such a spillage is drifting or is likely to drift into a response region of another Contracting Party, that Party shall without delay be informed of the situation and the actions that have been taken.

Regulation 8; Assistance

1. According to the provisions of paragraph 3 of Regulation 1:

   a) a Contracting Party is entitled to call for assistance by other Contracting Parties when responding to a pollution incident at sea; and

   b) Contracting Parties shall use their best endeavours to bring such assistance.

2. Contracting Parties shall take necessary legal or administrative measures to facilitate:

   a) the arrival and utilization in and departure from its territory of ships, aircraft and other modes of transport engaged in responding to a pollution incident or transporting personnel, cargoes, materials and equipment required to deal with such an incident; and

   b) the expeditious movement into, through, and out of its territory of personnel, cargoes, materials and equipment referred to in sub-paragraph a).

Regulation 9; Reimbursement of Cost of Assistance

1. The Contracting Parties shall bear the costs of assistance referred to in Regulation 8 in accordance with this Regulation.

2. a) If the action was taken by one Contracting Party at the express request of another Contracting Party, the requesting Party shall reimburse to the assisting Party the costs

of the action of the assisting Party. If the request is cancelled the requesting Party shall bear the costs already incurred or committed by the assisting Party.

b) If the action was taken by a Contracting Party on its own initiative, this Party shall bear the costs of its action.

c) The principles laid down above in sub-paragraphs a) and b) shall apply unless the Parties concerned otherwise agree in any individual case.

3. Unless otherwise agreed, the costs of the action taken by a Contracting Party at the request of another Party shall be fairly calculated according to the law and current practice of the assisting Party concerning the reimbursement of such costs.

4. The provisions of this regulation shall not be interpreted as in any way prejudicing the rights of Contracting Parties to recover from third parties the costs of actions taken to deal with pollution incidents under other applicable provisions and rules of international law and national or supra-national regulations.

Regulation 10; Regular Co-operation

1. Each Contracting Party shall provide information to the other Contracting Parties and the Commission about:

a) its organization for dealing with spillages at sea of oil and other harmful substances;

b) its regulations and other matters which have a direct bearing on preparedness and response to pollution at sea by oil and other harmful substances;

c) the competent authority responsible for receiving and dispatching reports of pollution at sea by oil and other harmful substances;

d) the competent authorities for dealing with questions concerning measures for mutual assistance, information and co-operation between the Contracting Parties according to this Annex; and

e) actions taken in accordance with Regulations 7 and 8 of this Annex.

2. The Contracting Parties shall exchange information on research and development programs, results concerning ways in which pollution by oil and other harmful substances at sea may be dealt with and experiences in surveillance activities and in responding to such pollution.

3. The Contracting Parties shall on a regular basis arrange joint operational combatting exercises as well as alarm exercises.

4. The Contracting Parties shall co-operate within the International Maritime Organization in matters concerning the implementation and further development of the International Convention on Oil Pollution Preparedness, Response and Co-operation.

Regulation 11; HELCOM Combatting Manual

The Contracting Parties agree to apply, as far as practicable, the principles and rules included in the Manual on Co-operation in Combatting Marine Pollution, detailing this Annex and adopted by the Commission or by the Committee designated by the Commission for this purpose.

13. HELCOM RECOMMENDATIONS AND RELATED GUIDELINES ON COMBATTING MATTERS

13.1 LIST OF VALID HELCOM RECOMMENDATIONS AND RELATED GUIDELINES

HELCOM Recommendation 11/13

Recommendation concerning development of national ability to respond to spillages of oil and other harmful substances
- adopted 14 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention
  (supersedes HELCOM Recommendations 1/7 and 4/3)

Guidelines for applying HELCOM Recommendation 11/13 on development of national ability to respond to spillages of oil and other harmful substances
(CC 17/15, Annex 5)

HELCOM Recommendation 12/7

Recommendation concerning special cooperation in case of a chemical tanker accident in the Baltic Sea
- adopted 20 February 1991, having regard to Article 13, Paragraph b) of the Helsinki Convention

HELCOM Recommendation 12/8

Recommendation concerning airborne surveillance with remote sensing equipment in the Baltic Sea Area
- adopted 20 February 1991, having regard to Article 13, Paragraph b) of the Helsinki Convention
  (supersedes HELCOM Recommendation 7/11)

HELCOM Recommendation 12/9

Recommendation concerning follow-up studies in connection with major oil spills
- adopted 20 February 1991, having regard to Article 13, Paragraph b) of the Helsinki Convention

Guidelines for oil spill follow-up studies
(HELCOM 12/18, Paragraph 9.15 referring to HELCOM 12/9, Attachment 5)

HELCOM Recommendation 17/12

Recommendation concerning measures to abate pollution by oil and other harmful substances in cases of grounding, collision, sinking of a ship or other maritime casualty
- adopted 13 March 1996, having regard to Article 13, Paragraph b) of the Helsinki Convention

HELCOM Recommendation 19/17

Recommendation concerning measures in order to combat pollution from offshore units
- adopted 24 March 1998, having regard to Article 13, Paragraph b) and Regulation 2 of Annex VI of the Helsinki Convention
  (supersedes HELCOM Recommendation 10/10)

HELCOM Recommendation 19/18

Recommendation concerning reporting on incidents involving harmful substances and emergency dumping

- adopted 24 March 1998, having regard to Article 13, Paragraph b) of the Helsinki Convention

(supersedes HELCOM Recommendation 7/12)

HELCOM Recommendation 20/5

Recommendation concerning minimum ability to respond to spillages in oil terminals

- adopted 23 March 1999 having regard to Article 13, Paragraph b) of the Helsinki Convention 1974

(supplements HELCOM Recommendation 11/13)

HELCOM Recommendation 22/2

Recommendation concerning restricted use of chemical agents and other non-mechanical means in oil combatting operations in the Baltic Sea Area

- adopted 21 March 2001 having regard to Article 20, Paragraph 1 b) of the Helsinki Convention

(supersedes HELCOM Recommendation 1/8)

HELCOM Recommendation 24/7

Recommendation concerning further development and use of drift forecasting for oils and other harmful substances in the Baltic

- adopted 25 June 2003, having regard to Article 20, Paragraph 1 b) of the Helsinki Convention

(supersedes HELCOM Recommendation 12/6)

Guidelines for the implementation of HELCOM Recommendation 24/7 on further development and use of drift forecasting for oils and other harmful substances in the Baltic
(HELCOM RESPONSE 1/2002, 14/1/Rev.1, Annex 4)

HELCOM Recommendation 24/9

Recommendation concerning ensuring adequate emergency capacity

- adopted 25 June 2003, having regard to Article 20, Paragraph 1 b) of the Helsinki Convention

Guidelines for the implementation of HELCOM Recommendation 24/9 on ensuring adequate emergency capacity
(HELCOM RESPONSE 2/2003, 13/1, Annex 3)

ELCOM Recommendation 28E/12

Recommendation on strengthening of sub-regional co-operation in response field

- adopted 15 November 2007, having regard to Article 20, Paragraph 1 b) of the Helsinki Convention

13.2 VALID HELCOM RECOMMENDATIONS AND RELATED GUIDELINES

HELCOM Recommendation 11/13
(This Recommendation supersedes HELCOM Recommendations 1/7 and 4/3.)

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

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

THE COMMISSION,

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

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

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

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

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

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

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

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

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

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

b) to respond to major oil spillages

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

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

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

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

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

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

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

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

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

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

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

*) the relevant reference is to Annex VII of the 1992 Helsinki Convention
**) The given response time limit can also be fulfilled by agreed regional cooperation of other Contracting Parties.
***) the present Volume 2 of the HELCOM Response Manual

GUIDELINES FOR APPLYING HELCOM RECOMMENDATION 11/13 ON DEVELOPMENT OF NATIONAL ABILITY TO RESPOND TO SPILLAGES OF OIL AND OTHER HARMFUL SUBSTANCES

1. INTRODUCTION

The purpose of these guidelines is to specify detailed technical and operational demands concerning the implementation of HELCOM Recommendation 11/13 on development of national ability to respond to spillages of oil and other harmful substances.

It must be realized that due to adverse weather conditions and probable local limitations the demanded operational and technical means can not always ensure a successful cleaning operation at sea.

2. SPILL SPREADING

2.1 Oil

Oil spill spreading is a very fast process calling for immediate reactions with a maximum of recovery vessels in order to use effectively the first spreading phase with appropriate layer thicknesses. Experiences have shown that the key of effective recovery lies in the first 24 hours after a spontaneous outflow. The layer thickness in relation to the elapsed time and the potential surface sweeping performance must be used for the definition of the needed capacity, taking into account weathering of the oil, type and viscosity, sea state and wind influences.

2.2 Liquid substances

Spreading, dispersion and dissolution of liquid chemicals in almost all cases runs much faster; the tracing of this process is often very difficult as many of the floating substances are colourless and odourless with a very low viscosity.

Response measures in case of chemical spillages often have to be limited to tracing the remnants of the released substance and to alert threatened population or ship crews.

Aerial reconnaissance flights, especially with helicopters, are hereby a very helpful tool to position the combatting units in those areas where most of the outflow is concentrated.

3. DETECTION AND MONITORING

The delectability of a discharged hazardous liquid substance includes the localizing, identification and tracing of the substance in the aquatic environment. This precondition for adequate response measures depends mainly on the density, vapour pressure, solubility, viscosity, surface and interfacial tension, colour and odour of the substance. Most of these properties are relevant also for the penetration in the sea bottom sediment. For their own safety and for supporting salvage and recovery actions response units must have a minimum standard of detection tools (detection kits) to ensure a minimum of risk for involved crew members.

For situation and safety analysis in case of response spills, several measurements and observations are needed, such as:

- identification of the polluter
- identification of the pollutant
- measuring the properties of the pollutant
- localizing the polluted area

- determining the dimensions of the polluted area
- hazard identification
- measuring details regarding the atmospheric conditions prevailing on the spill site.

To protect response personnel and the area immediately affected, the chemical spill and its hazards should be assessed prior to undertaking counter-pollution actions.

4. SKIMMER PERFORMANCE

Based on a certain outflow quantity one might use the skimmer performances per hour in order to quantify the recovery capacity per day or within two days, but the manufacturers' figures are mostly based on extremely favourable circumstances with unrealistic layer thicknesses and assuming also a calm sea surface. Therefore, those figures are neither comparable nor reliable, as the Baltic Sea States operate various skimmer systems.

5. CONTAINMENT BOOMS

A provision of having a certain length of containment booms available could be an appropriate part of the specified equipment. The length of the boom capacity could be orientated on the fact that e.g. a spill caused by 10,000 m^3 of oil will after 24 hours cover an area of 30-60 km^2. But the main part of the total outflow is concentrated mostly on an area covering only 10 percent of the whole contaminated surface. Assuming that this slick concentration is drifting within the down-wind side of the moving slick then a total length of 2,000 m is needed to ensure that most of the slick concentration is surrounded.

But those countries which have based their recovery capacity on self-propelled skimmer ships with e.g. sweeping arms/spring-sweep systems or combination of deflecting containment booms with skimmer devices in the apex of the V-shape may prefer a higher sweeping capacity - see 6.2 - which can compensate large lengths of high sea booms in combination with various skimmer types.

Consequently, the following minimum requirements are demanded for:
- containment sea boom lengths, with auxiliary vessels to launch booms and deploy skimmers
- autonomous self driven skimmer ships with the definition of cleaning performance per day in km^2
- performance per day of adhesion/suction devices like belt-disc skimmer/weir and vortex skimmers.

6. CAPACITIES TO RECOVER VARIOUS PERSISTENT OIL TYPES

The minimum requirements are as follows:

6.1 2,000 m high sea booms

6.2 2.5 km^2 of sweeping performance. The calculated area is hereby based on a working speed of 1-2 knots of the sweeping or skimming vessels. A sweeping area of 4.5 km^2 has to be fulfilled by those countries which mainly use autonomous drive skimmer ships. The total boom length of 2,000 m can be diminished to 1,200 m if the sweeping capacity is considerably greater.

6.3 Six (6) high performance sea skimmers with full sets of auxiliary equipment.

6.4 Sufficient storage tank capacity should be available at sea for continuous operations. The land-based disposal arrangements of the recovered mixture close to the potential sea areas must also be ensured.

7. REQUIREMENTS TO RECOVERY/RESPONSE VESSELS

7.1 Minimum required measuring equipment on board a response vessel:

a) Generally, response ships that could be involved in the release of hazardous materials should be permanently equipped with an adequate supply of protective clothing and breathing apparatus for those crew members likely to become involved in responding to an emergency spill situation. For the detection, the determination of the dimension or the determination of the concentration of a spill, several measuring devices will be needed.

It is recommended to have on board a response vessel the following safety and protection equipment:

- protective clothing (oilskins, gloves, full protective suit, breathing hood, goggles, respirators, canister-type mask, oxygen breathing apparatus, face mask or hood)
- devices for measuring toxic atmosphere (chemical reaction tubes)
- explosive meter
- photo or flame ionisation detector
- sampling devices
- flash point meter
- pH-meter
- electric conductivity meter
- radiation meter
- oxygen meter
- thermometer
- test kit.

b) In addition to this basic equipment it is advisable to be equipped with side scanning sonars and echo sounders with high sensitivity and high ground resolution. Bottom sampling devices and visual perception by remote controlled TV-cameras or TV-cameras operated by divers.

7.2 Each Contracting Party should have precautions made to provide, in case of emergency lightering operations, sufficient tank capacity to ensure the refloating of a grounded vessel or to lighter endangered tank capacity, e.g. by settling a model contract with tankship owners or tankship owners' association.

7.3 Salvage and recovery of sunken or lost packaged dangerous goods

The response unit should have or make arrangements for sufficient space on board to store recovered packages with leaking corrosive or toxic contents in a water-protected and air-tight space; alternatively special containers meeting the aforementioned properties can also be used for provisional storage of harmful packages.

A set of overpacks is needed to transfer leaking drums or cylinders with compressed or radioactive substances in emergency situations.

Each Contracting Party should ensure that in case of responding to a chemical spill including salvage or recovery of packaged goods the response unit and the strike teams on board must be equipped and/or protected to encounter the following hazards:

- combustibility
- corrosivity
- explosiveness
- flammability
- radioactivity
- toxicity in air and in water.

HELCOM Recommendation 12/7

Adopted 20 February 1991
having regard to Article 20 Paragraph 1 b)
of the Helsinki Convention

SPECIAL COOPERATION IN CASE OF A CHEMICAL TANKER ACCIDENT IN THE BALTIC SEA

THE COMMISSION,

RECALLING Article 11 and Annex VI*) of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), concerning cooperation in combating marine pollution which also covers cooperation in combating chemical spillages,

RECALLING ALSO the provision of Regulation 9.1.d of Annex VI**) to the Convention, which establishes an information network between the competent authorities of the Contracting Parties,

RECALLING FURTHER that HELCOM Recommendation 11/13 concerning the development of national ability to respond to spillages of oil and other harmful substances establishes common requirements for national ability to combat chemical spillages,

RECOGNIZING that in combating chemical spillages, special expertise on several fields is needed, and all necessary experts may not be available in each of the Contracting Parties, especially if the accident occurs off the coast of a Contracting Party where the chemical concerned is not used on a large scale,

RECOGNIZING ALSO that disposal of chemical wastes originated from the combatting operation may cause overwhelming difficulties to the third Parties not using that chemical,

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

a) nominate a contact point through which competent authorities of other Contracting Parties can, in emergency situations, without delay get information on the chemicals carried by a tanker from or to a harbour of a Party concerned;

b) by national measures create as soon as possible but not later than by the end of 1992 an information system which would, in case of a chemical spillage, facilitate access by the competent authorities to data concerning the chemicals carried by the tankers;

c) provide, in accordance with Regulation 8 of Annex VI*) to the Convention, and within their ability, other Parties with special assistance like experts to respond to chemical spillages, special protective clothing and equipment for combating personnel, and special instruments for chemical analyses,

RECOMMENDS ALSO that the Governments of the Contracting Parties inform each other of their national facilities where chemical wastes emanating from combating operations can be treated and disposed of and make all efforts to provide necessary waste treatment possibilities after an accident has occurred off the coast of another Contracting Party,

AUTHORIZES the Combatting Committee***) to develop an appropriate section concerning the implementation of this Recommendation to be included into the Manual on Co-operation in Combatting Marine Pollution****),

URGES FURTHER that action taken by the Contracting Parties to implement this Recommendation should be reported to the Commission and its Combatting Committee***) for the first time before 30 May 1993.

*) the relevant reference is to Annex VII of the 1992 Helsinki Convention
**) the relevant reference is to Regulation 10 of the 1992 Helsinki Convention
***) the relevant reference is to the HELCOM Response Group
****) note that Volume 2 of HELCOM Response Manual “Response to accidents at sea involving spills of hazardous substances and loss of packages dangerous goods” has already been developed and is available at HELCOM home page

HELCOM Recommendation 12/8
(This Recommendation supersedes HELCOM Recommendation 7/11)

Adopted 20 February 1991
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

AIRBORNE SURVEILLANCE WITH REMOTE SENSING EQUIPMENT IN THE BALTIC SEA AREA

THE COMMISSION,

RECALLING Regulation 3 of Annex VI*) of the Helsinki Convention according to which the Contracting Parties shall develop and apply, individually or in co-operation, surveillance activities covering the Baltic Sea Area, in order to spot and monitor oil and other harmful substances released into the sea,

BEING CONVINCED that airborne surveillance with remote sensing capabilities provides a greatly enhanced capability for improving the response to major oil releases of the shipping casualty type,

ALSO BEING CONVINCED that airborne surveillance with remote sensing capabilities provides a potential improvement in the ability to collect evidence for prosecution purposes in cases of illegal operational discharges from ships,

FURTHER BEING CONVINCED that regular airborne surveillance has a deterrent effect on potential offenders of the discharge regulations of the relevant conventions,

CONSCIOUS that the surveillance can only be efficient if remote sensing equipment, that can function also at night and in bad weather, is used,

NOTING that joint action by the Parties on aerial surveillance has started in accordance with a special HELCOM plan,

RECALLING that the Ministerial Declaration of the ninth meeting of the Helsinki Commission calls for the development and establishment of airborne surveillance with adequate sensor systems,

RECALLING FURTHER that the Baltic Sea Declaration by Heads of Governments and Ministers assembled in Ronneby, Sweden, in September 1990, stressed the need to encourage considerably intensified cooperation regarding airborne surveillance between the respective competent authorities,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention should introduce airborne surveillance with remote sensing equipment in their surveillance of the Baltic Sea Area as soon as possible but not later than by the end of 1994,

*) the relevant reference is to Annex VII of the 1992 Helsinki Convention

RECOMMENDS ALSO that the Governments of the Contracting Parties to the Helsinki Convention take action to

a) intensify their endeavour to cover by individual/and joint action the whole of the Baltic Sea Area with regular and efficient airborne surveillance;

b) develop and improve the existing remote sensing systems so that they can function efficiently also at night and in bad weather conditions; and

c) improve the possibility to use the information given by the surveillance as evidence to court for the prosecution of offenders of oil discharge regulations,

RECOMMENDS FURTHER that the Governments of the Contracting Parties to the Helsinki Convention, bilaterally or multilaterally, undertake to co-ordinate such surveillance activities which take place outside territorial waters, as appropriate.

HELCOM Recommendation 12/9

Adopted 20 February 1991
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

FOLLOW-UP STUDIES IN CONNECTION WITH MAJOR OIL SPILLS

THE COMMISSION,

RECALLING Article 16*) of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention), concerning, inter alia, promotion of studies on the assessment of the nature and extent of pollution in the Baltic Sea Area and the tasks of the Helsinki Commission in this respect,

BEING MINDFUL that accidents may form a remarkable part of the oil pollution load on the Baltic Sea and that major oil spills may have enormous adverse ecological and economical consequences in the Baltic Sea,

BEING ALSO MINDFUL that the Contracting Parties have conducted follow-up studies in connection with past oil spills,

RECOGNIZING the need for commonly adopted principles and guidelines for such studies,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention study the ecological and economical effects of accidental oil pollution in connection with every major oil spillage in the Baltic Sea,

RECOMMENDS FURTHER that the Governments of the Contracting Parties should use the Guidelines adopted jointly by the Environment and Combatting Committees of the Helsinki Commission when conducting such follow-up studies.

*) the relevant reference is to Article 24 of the 1992 Helsinki Convention

GUIDELINES FOR OIL SPILL FOLLOW-UP STUDIES

(relating to HELCOM Recommendation 12/9, adopted in March 1991)

The guidelines consist of the studies and research tasks which are of importance to be implemented in cases of major oil spills. The guidelines are divided into five functional parts, namely **(1) organization of research work, (2) physical and chemical studies, (3) ecological studies, (4) fishery studies and (5) documentation**. It must be recognized that the guidelines do not give exact information or detailed methods for the way the studies must be practically and technically carried out and arranged in the Contracting Parties to the Helsinki Convention because these matters depend on the readiness of the responsible research and combatting organizations of the Countries.

The guidelines will introduce the research work as an essential and useful part of the total response operation involving every large oil spill incident for purpose to assist combatting operations and to provide necessary evidence linking oil pollution damage and an oil spill at hand, and furthermore, to assess impacts of oil on the marine environment and natural resources.

The studies shall be carried out by responsible research institutes. Research actions must be started immediately after a major oil spill simultaneously with the combatting operation. The national Contingency Plan should also cover the plans for follow-up studies. In the research plan an expert group or institute with responsible names of persons is nominated to take care of necessary research tasks.

The cooperation between the research and combatting staffs should be active and kind of mutual exchange of information. The scientific input to the combatting operation is characterized as to make analyses and summaries on cumulated data and to try to translate it in relation to a real situation.

How extensive the research work will be depends on the severity of the oil spill situation. Several extra studies are needed to be carried out if the oil has sunk or been intensively dispersed and disappeared in a margin sea area or a dispersant has been used as a combatting measure.

1. ORGANIZATION OF RESEARCH WORK

It is necessary to make in advance a research plan which contains information on research resources applicable and available for oil spill follow-up studies. In such a plan the responsible person (coordinator) for this purpose should be nominated in advance. The plan shall include procedures on how the research organization can be alerted and activated in the event of an oil spill.

In every severe oil spill situation a senior research scientist or specialist group will coordinate and take care of the necessary research tasks in accordance with the research plan. She/he is responsible:

(1) **for making** a detailed plan of research actions in regard to severity and development of an actual spill situation;

(2) **for arranging** cooperation between responsible national research organizations, research and combatting organizations and to take care of administrative and financial matters related to the research work. A cooperative group of members of research and combatting organizations may be established for the purpose to assist in the cooperation between the organizations;

(3) **for contracting** other responsible research organizations and delegating the necessary research tasks to be carried out;

(4) **for arranging**, in case the oil has spread into the territorial waters of the neighbouring countries, cooperation between the research organizations of the countries involved;

(5) **for participating** in a surveyor group which will always be established by the authorities in a severe oil spill incident for the purpose to investigate and gather the claims from those who have suffered pollution damage;

(6) **for providing** information on the environmental effects of an oil accident;

(7) **for preparing** a final research report based on the results of the studies carried out during an oil spill incident.

2. PHYSICAL AND CHEMICAL STUDIES

Physical and chemical studies to be implemented in every severe oil spill incident concern the following research tasks:

(1) **To establish** data on the type and quality of a spilled oil immediately after a spill. If data is missing or the oil type is unknown, analyses of physical and chemical properties, such as **density, viscosity, pour point, water and wax content of oil**, must be carried out as soon as possible. **Pure (fresh) oil** from the ruptured tanks or containers must be saved and be available for use as a reference oil for identification purpose and other analyses.

(2) **To predict** the behaviour and **to estimate** the spreading of oil on the basis of the first-hand data on physical and chemical properties and in regard to prevailing conditions as soon as possible. The use of available computerized spreading models is encouraged to help the combatting operations and as well as the research work on impact assessments as general.

(3) **To determinate** the degree of alteration and **to estimate** the behaviour of weathered oil in slicks at sea. Oil samples for physical and chemical analyses will be collected following a strict timetable, if the oil is moving uncontrolled within a very wide sea area, e.g. oil drifting with ice.

(4) **To identify** the origin of the oil in slicks detected at sea, on shores and e.g. in damaged fish traps. Although it would seem clear that the detected oil originates from an actual oil spillage at hand, it must be proven by chemical analyses. Results of these analyses are necessary evidence for the documentation of the oil spill situation and for compensation matters.

(5) **To provide** evidence on the fate of oil, degree and extent of oil pollution/contamination in the marine environment. **Water and sediment samples will be collected** for chemical analyses of petroleum hydrocarbons, e.g. of total petroleum hydrocarbons (by UV/F) or more qualitatively of aliphatic fractions (by GC) and aromatic hydrocarbons (by GC/MS or HPLC). This should always be done in the oil spill situations when the oil has intensively dispersed, sunk or disappeared or a dispersant has been used as a combatting measure.

(6) **To summarize and establish** the spreading area of oil according to available data on oil observations, combatting and clean-up operations, reconnaissances of oil on shores, chemical analyses of seawater and sediments etc. It must be noted that a spreading area of oil is probably not the same as an oil-influenced sea area. This can be established only after some of the studies pointed out in chapters 3 and 4 have been performed.

3. ECOLOGICAL STUDIES

The ecological studies to be implemented in cases of severe oil spills concern the following research tasks:

(1) **To verify** the vulnerability of the nature protection areas of archipelagos and coast, important nesting islands of sea birds, breeding zones of seals, fishing zones which are of priority to be protected against oil pollution. There is always a need for up-to-date information on sensitivity of sea bird communities, seal populations and fish stocks which are depending on seasons. This information will assist a combatting organization to concentrate their protection measures on the right targets and areas. To prepare Environmental Atlases over the vulnerable areas is of priority and will promote not only the oil pollution control but also other kinds of research and monitoring programs.

(2) **To quantify and document** losses of natural resources e.g. kills of sea birds, fish and seal pups, damage on vegetation **as well as** the degree of oil pollution in the oil-affected areas and results of clean-up actions there, damages on fish traps/catches and other damages. Furthermore, expected impacts on affected targets will be estimated.

(3) **To quantify** the degree and extent of oil-contamination in marine organisms. Indicator organisms should always be collected and studied in the oil spill situations when a dispersant has been used or oil has intensively dispersed or sunk or disappeared in a margin sea area. Some good indicator species are the amphipods, **Gammarus sp. and Pontoporeia sp.**, which are also an important food source for fish. These have been proven to be very sensitive for oil pollution. Oil droplets are visible and the degree of contamination can easily be determined by using microscope technique. Also the gastropod **Lymnaea sp.**, which is common for the whole basin of the Baltic Sea, can be sampled for chemical and histopathological analyses as well as the bivalves, common blue mussel (**Mytilus edulis**) and the Baltic clam (**Macoma balthica**). Analyses of petroleum hydrocarbons as pointed out in chapter 2 (paragraph 5) will give more comprehensive data on the extent of a sea area influenced by oil. Fish species useful for oil spill follow-up studies are listed in chapter 4.

Additional studies on the quantitative effects on the sea-floor fauna and also on zooplankton and phytoplankton should be carried out in relation to the severity of the spill situation and the need for these kind of studies.

The results of the ecological studies are of importance when considering the need for restoration of the nature damaged by oil.

4. FISHERY STUDIES

(1) **To quantify and document** the damage on fisheries. All the reported damages on fisheries must be confirmed and documented at the place of damage by authorities of a research or combatting organization. Damaged traps will be photographed and an oil sample will be taken for identification. If there is a doubt about the tainting of the catches a sample of the fish can be delivered to a laboratory specialized e.g. in analyses of petroleum hydrocarbons or in odour and flavour tests. Furthermore, collecting and studying statistics on catches will also bring evidence on the possible effects of oil, e.g. diminished catches are always of biological interest but these can have also economical consequences.

(2) **To study biological effects** on fish. Fish species to be pointed out are flounder (**Platichtys flesus L.)**, Baltic herring (**Clupea harengus membras L.**) and Smelt **Osmerus eperlanus L.** and their larvae. Also other fish species common in an oil-affected sea area can be chosen, e.g. perch (**Perca fluviatilis L.**). These fish species can be sampled for different purposes; to study diseases, physiological changes, reproduction disturbances, abnormalities and tainting, and as a whole to bring evidence into which degree the oil has affected fish.

5. DOCUMENTATION

(1) A final report shall be prepared on the basis of different research documents delivered by sub-organizations.

(2) Research documents (reports) will consist of the results of the follow-up studies and other investigations and all necessary data to be of importance for final consideration and for preparation of strategy for continuing research work, e.g. to study recovery of affected sea areas.

(3) For instance, a documentation of analytical and circumstantial evidence can be done **with maps** consisting of all information on oil movements and dates, relevant wind and current data, spreading area of oil, oil polluted areas of archipelagos and coastline and degree of pollution and results of clean-up actions of shores. The maps will be designed so that they serve as necessary documents for compensation applications addressed to polluters, insurance companies and the International Oil Pollution Compensation Fund. Furthermore, the maps will serve the planning of further studies in the affected sea area months after an oil spill incident.

(4) The final report should:

describe the geographical distribution of the oil and the degree of oil pollution in the affected sea areas,

estimate the fate of the oil,

provide evidence linking the actual oil spill and the documented damage of the oil pollution,

identify the sensitive and affected targets,

assess the ecological effects and the impact on fisheries,

predict the long-term effects and

establish a strategy for continuing research work with the aim to recover the affected parts of a marine ecosystem.

(5) The final document should also provide feedback information on the unexpected environmental effects of the oil combatting operations performed during the acute phase of an oil spill situation.

HELCOM RECOMMENDATION 17/12

Adopted 13 March 1996
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

MEASURES TO ABATE POLLUTION BY OIL AND OTHER HARMFUL SUBSTANCES IN CASES OF GROUNDING, COLLISION, SINKING OF A SHIP OR OTHER MARITIME CASUALTY

THE COMMISSION,

RECALLING paragraphs 6 and 7 of Article 2, Article 11, Annex II and Annex VI of the 1974 Helsinki Convention and paragraphs 7, 8 and 9 of Article 2, paragraphs 1 and 2 of Article 3, Article 5, Article 14, Annex I and Annex VII of the 1992 Helsinki Convention,

RECALLING ALSO International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 and Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973, as amended,

RECALLING FURTHER Articles 211 and 221 of the United Nations Convention on the Law of the Sea,

BEARING IN MIND the recent incidents which posed a serious threat to the marine environment of the Baltic Sea Area and to the coastlines and related interests of the Contracting Parties to the Helsinki Convention,

CONSCIOUS that the introduction of any harmful substance to the marine environment of the Baltic Sea is liable to cause pollution,

BEING AWARE of the importance of precautionary measures to avoid pollution caused by maritime casualties,

TAKING INTO ACCOUNT the polluter-pays principle stipulated in the 1992 Helsinki Convention,

REQUESTS the Governments of the Contracting Parties, which have not yet done so, to ratify the International Convention on Salvage, 1989, in order to establish a modern legal regime concerning efficient and timely salvage operations to maintain the safety of the vessels, to protect other property in danger and the marine environment of the Baltic Sea Area,

REQUESTS ALSO the Governments of the Contracting Parties, which have not yet done so, to ratify the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT 1992) and the Protocol of 1992 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 (FUND PROT 1992), in order to ensure compensation for responding to oil pollution incidents in the exclusive economic zones or equivalent areas of the Contracting Parties,

REQUESTS FURTHER the Governments of the Contracting Parties:

i) to cooperate within the International Maritime Organization (IMO):

1. to promote early elaboration of a convention on wreck removal;

2. to study possibilities of amending the list of substances annexed to the 1973 Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil (INTERVENTION PROTOCOL, 1973) by inclusion of other harmful substances, such as nutrients, which give coastal states the right to intervene in sea areas particularly sensitive to any kind of pollution;

3. to study proposals concerning the amendment of MARPOL 73/78 by a new annex related to solid harmful substances;

ii) to cooperate during the diplomatic conference to be arranged by IMO for the purpose of

1. amending the 1976 Convention on Limitation of Liability for Maritime Claims (CLLMC) by higher limits of liability; and

2. adopting the convention for liability and compensation for damage caused by hazardous and noxious substances (HNS Convention),

URGES the Governments of the Contracting Parties, in cases of grounding, collision, sinking of a ship or other maritime casualty, to take appropriate action on the basis of international law in their exclusive economic zones or equivalent areas, or in response regions in accordance with Regulation 7 of Annex VI*) to the Convention, to:

1. remove the bunker fuel oil, other oils and any other harmful substance carried as a cargo on board which may cause or are likely to cause immediate or delayed hazards to the marine environment, coastlines of the Contracting Parties or their related interests;

2. carry out salvage of a ship and removal of a wreck whenever she may pose a danger to the safety of navigation and to the marine environment,

URGES ALSO the Governments of the Contracting Parties to provide the Combatting and Maritime Committees with reports on the progress related to this Recommendation every year.

*) the relevant reference is to Annex VII of the 1992 Helsinki Convention

HELCOM Recommendation 19/17
(This Recommendation supersedes HELCOM Recommendation 10/10.)

Adopted 24 March 1998
having regard to Article 20, Paragraph 1 b)
and Regulation 1, Paragraph 1 of Annex VII
of the Helsinki Convention

MEASURES IN ORDER TO COMBAT POLLUTION FROM OFFSHORE UNITS

THE COMMISSION,

RECALLING Article 10 of the 1974 Helsinki Convention which stipulates, inter alia, that each Contracting Party shall ensure that adequate equipment is at hand to start an immediate abatement of pollution in the Baltic Sea Area, *)

RECALLING ALSO Article 12 of the 1992 Helsinki Convention which stipulates, inter alia, that each Contracting Party shall ensure that adequate preparedness is maintained for immediate response actions against pollution incidents caused by exploration and exploitation of the seabed and its subsoil,

RECALLING further Regulation 7 of Annex VI and Regulation 2 of Annex VII of the 1992 Helsinki Convention concerning contingency planning,

NOTING HELCOM Recommendation 1/8 on Minimization of the Use of Dispersants, Sinking Agents and Absorbents in Oil Combatting Operations in the Baltic Sea**) and HELCOM Recommendation 11/13 concerning the development of national ability to respond to spillages of oil and other harmful substances and guidelines for applying this Recommendation,

BEING AWARE of other HELCOM activities concerning restriction of discharges and monitoring of exploration and exploitation of the seabed and its subsoil,

BEING ALSO AWARE of the IMO Manual on Oil Pollution - Section II, Appendix 2 AOil pollution emergency plans for offshore units, seaports and oil handling facilities@, which has been developed within IMO under the umbrella of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990,

RECOMMENDS the Governments of the Contracting Parties to the 1974 Helsinki Convention***) to ensure that each of the offshore units shall be furnished with the Pollution Emergency Plan, developed in accordance with the principles specified below:

a) Pollution Emergency Plan shall be harmonized with the national contingency plan and approved in accordance with the procedure established by the appropriate national authority, and it shall take into account the risk assessment connected with the operation of the offshore unit;

b) Pollution Emergency Plans shall be drawn up before the offshore units are taken into use, and also shall be:

(i) appropriate to the type of the offshore unit,
(ii) relevant to the conditions of the offshore unit=s operation,
(iii) effective, i.e., friendly to users;

c) Pollution Emergency Plan shall appoint the exact storage place for the combatting equipment, e.g., the emergency stand-by vessel and/or a land base with due regard to location of the offshore unit;

d) 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. The response measures should be taken immediately by the operator of the platform. The other supporting measures within the overall contingency plan should be taken not later than in eight hours after the spillage;

e) The use of dispersants in oil combating operations is limited as far as possible and any such use is subject to authorization, in each individual case, by the competent national authorities;

f) Total capacity of the equipment should correspond with the spill expectancy rate:

(i) The quantity of the 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,

(ii) 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,

g) The equipment for combating operations must be able to fulfil the following requirements:

(i) Oil recovery systems, booms and transport material shall be designated to be operational under the conditions of wave height and current prevailing in the waters involved, limited to a significant wave height up to 20 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),

(ii) Combating equipment which is liable to be used under ice conditions must be well tested for this purpose;

h) The equipment for combating 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 the 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 g) (I),

(iii) In such cases the equipment shall be sufficient to allow combating of the substances present at that time;

i) The equipment shall be stored and maintained so that combating measures can be taken immediately,

REQUESTS the Governments of the Contracting Parties to continuously exchange information through the Helsinki Commission on the location and nature of all planned or accomplished offshore activities and on the nature and amounts of discharges as well as on contingency measures that are undertaken, and also to inform:

a) other Contracting Parties with borders to the sea area where offshore activities take place about the contingency measures taken for combating pollution of the sea, in due time before the offshore activities are started up;

b) the Combatting Committee****) about the approved measures on the conditions required for each separate offshore unit according to Paragraph d) above, as well as on other detailed information, which may be essential for a joint response to pollution incidents,

REQUESTS ALSO the Governments of the Contracting Parties to provide reports on the implementation of this Recommendation in accordance with a procedure established by the Combatting Committee****).

*) the relevant reference is to Article 14 of the 1992 Helsinki Convention requiring the Contracting Parties to maintain adequate ability and to respond to pollution incidents in order to eliminate or minimize the consequences of those incidences

**) the relevant reference is to HELCOM Recommendation 22/2 on restricted use of chemical agents and other non-chemical means in oil combating operations on the Baltic Sea area

***) the relevant reference is to the 1992 Helsinki Convention

****) the relevant reference is to the HELCOM Response Group

HELCOM Recommendation 19/18
(This Recommendation supersedes HELCOM Recommendation 7/12 concerning the application of the IMO guidelines for reporting incidents involving harmful substances.)

Adopted 24 March 1998
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

REPORTING ON INCIDENTS INVOLVING HARMFUL SUBSTANCES AND EMERGENCY DUMPING

THE COMMISSION,

RECALLING Regulation 5 of Annex VI concerning reporting on incidents involving harmful substances and Article 9, Paragraph 4 concerning emergency dumping of the 1974 Helsinki Convention,*)

RECALLING ALSO Regulation 5 of Annex VII concerning reporting procedure and Article 15**) on notification and consultation on pollution incidents as well as Regulation 1, Paragraph 2. a) of Annex VII concerning pollution incidents which affect or are likely to affect interests of other Contracting Parties and Article 11, Paragraph 4 concerning emergency dumping of the 1992 Helsinki Convention,

RECALLING FURTHER Article 8 and Protocol I (Resolution MEPC. 21(22)) of the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto (MARPOL 73/78),

TAKING INTO ACCOUNT HELCOM Recommendation 19/16 concerning co-operation in investigating violations or suspected violations of discharge and related regulations for ships, dumping and incineration regulations,

TAKING ALSO INTO ACCOUNT HELCOM Recommendation 17/13 concerning the use by the Baltic Sea States of the Manual on Co-operation in Combatting Marine Pollution within the framework of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) which contains, inter alia, a chapter (Volume I, Part II, Chapter 5) on the reporting procedures describing the POLREP BALTIC and ALGPOLREP systems,***)

NOTING with deep concern the number oil pollution incidents in the Baltic Sea Area,

CONSCIOUS that efficient and effective reporting on incidents involving harmful substances is an essential tool in taking appropriate and timely measures to combat pollution and to investigate the matter,

RECOMMENDS that the Governments of the Contracting Parties shall instruct ships flying the flag of the Contracting Parties to apply IMO Resolution A. 648(16) concerning General Principles for Ship Reporting Requirements, Including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants,****)

RECOMMENDS ALSO that IMO Resolution A. 648 (16)****) shall be applied as far as practicable in cases of emergency dumping,

RECOMMENDS FURTHER that for the purpose of notification and consultation on incidents referred to in Article 13 and Regulation 1, Paragraph 2. a) of Annex VII of the 1992 Helsinki

Convention, the Governments of the Contracting Parties shall apply the POLREP BALTIC system in case of a need of preventing, reducing and controlling pollution,

REQUESTS the Governments of the Contracting Parties to report on implementation of this Recommendation in accordance with Article 16, Paragraph 1 of the 1992 Helsinki Convention.

*) the relevant references are provided in the paragraph below
**) the relevant reference is to Article 13 of the 1992 Helsinki Convention
***) the relevant reference is to the HELCOM Response Manual which contains, inter alia, a chapter (Volume I, Chapter 3) on the reporting procedures describing the POLREP BALTIC and ALGPOLREP systems
****) IMO Resolution A. 648(16) has been superseded by IMO Resolution A.851(20) adopted by the Assembly of IMO on 27 November 1997

HELCOM Recommendation 20/5
(This Recommendation supplements HELCOM Recommendation 11/13.)

Adopted 23 March 1999
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

MINIMUM ABILITY TO RESPOND TO OIL SPILLAGES IN OIL TERMINALS

THE COMMISSION,

RECALLING Article 11 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention) and Article 14 of the 1992 Helsinki Convention according to which the Contracting Parties shall individually and jointly take all appropriate measures to maintain adequate ability and to respond to pollution incidents in order to eliminate or minimize the consequences of these incidents to the marine environment of the Baltic Sea Area,

RECALLING ALSO Annex VI of the 1974 Helsinki Convention and Annex VII of the 1992 Helsinki Convention which provide basic principles on co-operation of the Contracting Parties in responding to marine pollution incidents,

RECALLING FURTHER HELCOM Recommendation 1/8 on minimization of the use of dispersants, sinking agents and absorbents in oil combatting operations in the Baltic Sea Area*), HELCOM Recommendation 11/13 concerning development of national ability to respond to spillages of oil and other harmful substances and HELCOM Recommendation 17/13**) concerning the use by the Baltic Sea States of the Manual on Co-operation in Combatting Marine Pollution within the framework of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention),

RECALLING FURTHERMORE Article 7 of the 1992 Helsinki Convention on Environmental impact assessment and HELCOM Recommendation 17/3 concerning information and consultation with regard to construction of new installations affecting the Baltic Sea,

BEARING IN MIND the plans of the Contracting Parties to increase the amounts of oils to be transported at sea, the development of the existing and the construction of new oil terminals, and consequently the increased risk of pollution incidents during loading/unloading operations,

STRESSING that a pollution incident in a coastal area may cause serious damage to the well-being and the socio-economic development of the peoples, to the coastal ecosystems, to the natural habitats, to the biological diversity and to the ecological processes,

BEING AWARE that a pollution emergency plan for an oil terminal should be based on a systematical assessment of risks of oil spills and that the pollution emergency plan should be a part of the overall safety policy and safety planning of that oil terminal,

TAKING INTO ACCOUNT Article 3 of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC Convention) and the provisions of seaport emergency plans of Section II of the IMO Manual on Oil Pollution - Contingency Planning,

RECOMMENDS that the Governments of the Contracting Parties shall, as a supplement to HELCOM Recommendation 11/13 concerning development of national ability to respond to spillages of oil and other harmful substances, ensure that the Guidelines on minimum ability to respond to oil spillages in oil terminals attached to this Recommendation are applied by the oil terminals in their respective countries,

RECOMMENDS ALSO the Governments of the Contracting Parties to carry out Environmental Impact Assessment (EIA) studies in accordance with the 1991 Espoo Convention on Environmental Impact Assessment in a Transboundary Context and/or the European Council Directive 85/337/EEC of 27 June 1985 (as later amended) on the assessment of the effects of certain public and private projects on the environment before the plans for enlargement of existing oil terminals or construction of new oil terminals are decided,

AUTHORIZES the Combatting Committee***) to amend the Guidelines contained in the Attachment,

REQUESTS the Governments of the Contracting Parties to apply this Recommendation from the date of its approval to new oil terminals and in 2001 to existing oil terminals,

REQUESTS ALSO the Governments of the Contracting Parties to report on the implementation of this Recommendation, in accordance with Article 16, Paragraph 1 of the 1992 Helsinki Convention,

REQUESTS FURTHER the Governments of the Contracting Parties to report to:

- the Combatting Committee***) on the combating arrangements in oil terminals in accordance with the procedure approved by the Combatting Committee***), and

- the Environment and Technological Committees****) on the implementation of the concept of EIA studies in relation to oil terminals in their respective countries.

*) the relevant reference is to HELCOM Recommendation 22/2 “Restricted use of chemical agents and other non-mechanical means in oil combating operations in the Baltic Sea area”
**) the relevant reference is to HELCOM Response Manual
***) the relevant reference is to the HELCOM Response Group
****) the relevant reference it to the HELCOM Monitoring and Assessment Group and HELCOM Land-based Pollution Group

ATTACHMENT
HELCOM Recommendation 20/5

GUIDELINES ON MINIMUM ABILITY TO RESPOND TO OIL SPILLAGES IN OIL TERMINALS

1. INTRODUCTION

The purpose of these guidelines is to outline technical and operational means concerning the implementation of HELCOM Recommendation 20/5 concerning minimum ability to respond to oil spillages in oil terminals.

The Guidelines should be implemented in close co-operation between the Port Authority and the operators of the oil terminal, taking into account the situation of the terminal: whether at open sea[1)], within a semi-enclosed sea area or in an enclosed port area.

A pollution emergency plan for an oil terminal should be part of the safety arrangements of the port, aiming primarily at the prevention of accidents and oil spills. Safety arrangements shall be based on systematical risk assessments and analysis and on reducing the identified risks minimizing the possibility for an oil spill during oil tanker operations in ports and terminals.

In a port area there are normally several private operators in addition to the Port Authority, the operators being responsible for their own activities. It is important that one of the actors, mostly the Port Authority, takes care of the coordination of the safety arrangements of the various private operators. In a similar manner the Port Authority should prepare an overall contingency plan for the port and make sure that the pollution emergency plans of the various operators correspond with the overall contingency plan. The Port Authority and the operators shall exchange information about these plans and organize exercises on a regular basis.

Nevertheless, it must be realized that due to adverse weather conditions and probable local limitations the outlined operational and technical means can not always ensure a successful cleaning operation.

2. POLLUTION EMERGENCY PLANS

The Port Authority should ensure that each oil terminal has its own pollution emergency plan, elaborated in accordance with both Chapter 2 of Section II of the IMO Manual on Oil Pollution and with national regulations, and that these plans are a part of the overall port contingency plan in order to establish an organization, communication and other procedures for responding to marine oil spills. Due consideration should be given to all emergency incidents which could occur during ship movements and oil handling on jetties and terminals.

1) Oil terminals situated “at open sea” include also offshore terminals.

The pollution emergency plan must take into account:

- the type and quantities of handled oil (crude oil and oil products); special attention has to be paid to persistent oils,
- maximum dimensions of laden tankers and their dwt and dimension of the biggest cargo tank in m^3,
- maximum discharge rate (m3 per hour) and description of emergency stopping device,
- location of the terminal or jetty, such as open sea terminals, enclosed or semi-enclosed terminals,
- access from the port approach to the terminal,
- currents, exposition to sea swell,
- weather and ice conditions,
- manouvering space for terminal berthing tankers and tug boat regulations,
- description of the fairway from the open sea to the oil terminal.

3. POLLUTION RESPONSE EQUIPMENT

The pollution emergency plan should appoint the exact storage place for the combating equipment and its access.

The equipment should be located nearby the oil piers and jetties; in case of an open-sea loading platform or mooring boyos, on stand-by supply vessels. The response measures should be taken immediately by the terminal operator. Other supporting measures within the overall contingency plan should be a part of the pollution emergency plan, inter alia, tug boats and fire fighting vessels.

The total capacity of the equipment should correspond with the spill expectancy and the unloading or loading rate.

The equipment for combating operations should fulfill the following requirements:

- Oil recovery systems and booms shall be designated to be operational under the conditions:
  -- of wave heights up to two (2) m and current velocity of up to one (1) knot in open sea terminals, and
  -- of wave heights up to one (1) m and current velocity up to one (1) knot in enclosed and/or semi-enclosed ports.

Combating equipment which is liable to be used under ice conditions should be well tested for this purpose.

<u>Dispersants</u>

The use of dispersants in an enclosed port area is restricted to very exceptional cases, if no other adequate means can be applied and if the use of dispersants has no impact on the coastal Baltic Sea Area. Any such use is subject to authorization by the competent national authorities.

4. BOOM AND SKIMMER CAPACITIES

a) Confined port areas

The ability to close the port entrance in case of a serious outflow is recommended, if the width of the channel or entrance is not exceeding 1,000 m. The closing of the port entrance requires at least a **coastal sea boom** for this purpose.

b) Semi-enclosed port areas

Within semi-enclosed port areas coastal booms should be stored for easy access and for fast deploying to ensure the surrounding of the maximum tanker size.

In the case of both confined and semi-enclosed port areas, a specialised port cleaning boat is recommended when the wind direction and wind force lead to an oil-concentration in port regions or corners where booming and recovery with skimmers could be difficult. Vacuum trucks could also be useful for land-based clean-up operations.

c) Open sea terminals

A **high-sea boom** is recommended in open sea terminals and in ports with an entrance to the open sea or with an entrance exposed to the open sea.

Regular training with tugboats or other powerful auxiliary vessels should ensure a fast deployment of the booms.

If the current along the terminal or jetty exceeds 0.7 knots the boom configuration should be adjusted to maximum deployment angels to flow direction at different current strengths for bottom tension booms to prevent the escape of oil.

Technical information paper No. 2 of ITOPF[2)] contains further details on various boom deployments. The two-fold length of the maximum tanker should be the basis orientation when deciding the length of the booms within the port. Thus making it possible to prevent the oil already along the berth from spreading. This requires a high alert time and a trained tugboat crew.

In case of open sea terminals the length of high-sea booms should be at least not less than three (3) times the length of the maximum tanker visiting the terminal.

The skimmer performance should be orientated on the maximum wing tank capacity of the biggest tanker calling at the port or the terminal. The skimming capacity must be part of the standard response set, together with hydraulic generators suitable for operation in explosive atmosphere.

The skimming capacity should be sufficient to recover at least 50% of the tank contents within 24 hours.

The port or the terminal operator should update this calculation in close co-operation with the Port Authority in order to adjust the skimming capacity to changing tanker dimensions.

A permanent readiness for emergency response measures should be ensured during ship movements and/or oil loading/unloading activities for both confined port areas, semi-enclosed port areas and open sea terminals.

During winter and icy conditions special arrangements are recommended in addition to those described above.

[2)] ITOPF = International Tank Owners= Pollution Federation

HELCOM Recommendation 22/2
(This Recommendation supersedes HELCOM Recommendation 1/8.)

Adopted 21 March 2001
having regard to Article 20, Paragraph 1, b)
of the Helsinki Convention

RESTRICTED USE OF CHEMICAL AGENTS AND OTHER NON-MECHANICAL MEANS IN OIL COMBATTING OPERATIONS IN THE BALTIC SEA AREA

THE COMMISSION,

RECALLING Regulation 7 of Annex VII of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992 stipulating that mechanical means are the preferred response measures, and that chemical agents may only be used in exceptional cases, after authorization has been granted in each individual case,

RECALLING ALSO the IMO Guidelines on Oil Spill Dispersant Application and the Technical Information Paper No. 4 of the International Tank Owners= Pollution Federation,

BEARING IN MIND that new response means, such as bioremediation, fertilization techniques and biosorbents as well as their effective and regular use in oil spill response, are still at development stage,

RECOGNIZING that the in-situ burning of oil could be a response option, especially under ice conditions,

RECOMMENDS that when in individual cases authorizing the use of chemical agents the appropriate national authority should ensure the use of chemical agents with optimised efficiency and acceptable affects to the marine environment (net environmental benefit),

RECOMMENDS ALSO that when the national authority considers whether to authorize the use of chemical agents at open sea it should make careful use of the IMO Guidelines on Oil Spill Dispersant Application taking into account the following:

- potential damage to the marine environment, sea birds, and other marine resources, if no other response method can be successfully applied;

- quantity, type of oil and its natural dispersibility enhanced by higher sea-state and wind forces;

- new products have a widened range of application, e.g., in heavy fuel oil (HFO) spills or if the viscosity has already increased up to 10.000 centistokes (cst);

- use in shallow waters should be authorized only in exceptional cases, for instance if this is the only option to avoid serious losses of sea birds within endangered breeding colonies, and must be restricted to minor oil spills,

RECOMMENDS FURTHERMORE that the Governments of the Contracting Parties ensure that

- sinking agents are not used at all; and

- absorbents are used only when sufficient recovery devices ensure the timely removal of the absorbed oil from the sea surface,

REQUESTS the Governments of the Contracting Parties to report on the implementation of this Recommendation, to the Sea-based Pollution Group, in accordance with Article 16, Paragraph 1 of the Helsinki Convention.

HELCOM RECOMMENDATION 24/7
(This Recommendation supersedes HELCOM Recommendation 12/6 “Development of a drift forecasting system to respond to spills of oil and other harmful substances”.)

Adopted 25 June 2003
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

FURTHER DEVELOPMENT AND USE OF DRIFT FORECASTING FOR OILS AND OTHER HARMFUL SUBSTANCES IN THE BALTIC

THE COMMISSION,

RECALLING the need for accurate and swift prediction of the drift of oil and other harmful substances in connection with accidental or illegal spills for the efficiency of response measures, law enforcement and for the protection of the marine environment;

BEING AWARE of
- the enhanced threats due to increasing maritime traffic and oil transport in the Baltic Sea
- new big oil terminals requiring efficient forecasting tools
- the need for optimisation due to limited response resources in relation to big accidents
- the need to increase the ability to secure environmentally sensitive areas from accidental contamination
- the need to extend the existing open water drift forecasting system to include local and coastal forecasting requirements;

BEING AWARE ALSO of
- improved scientific and technological means to detect oil and to forecast its drift, including the enhanced ability of weather and sea circulation forecasting systems
- new opportunities given by modern development in information technology in presentation and dissemination of results;

MINDFUL of the potential to use results from drift modelling systems when hind-casting the drift of an oil slick for use in cases of illegal discharges;

TAKING INTO CONSIDERATION that the implementation of improved systems for the support of response operations in the Baltic Sea should be accelerated by co-operation between the Parties. Each user should contribute to the development of the joint drift forecasting system;

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

a) to further develop existing drift forecasting systems and to co-operate closely in doing so, bearing in mind new requirements;

b) to, in particular, focus the development on
   - modules for different types of oils, chemicals and also prediction of movements of oils and chemicals in ice;
   - linking the outcome of the drift modelling with GIS system, containing data of environmentally sensitive areas and other protective areas in order to better estimate the real threats and to guide the response operations and minimize the damages; and
   - higher resolution in coastal areas and archipelagos;

c) to use drift modelling as a mean to facilitate prosecution of offenders of oil and chemical discharge regulations,

RECOMMENDS FURTHER that the Governments of the Contracting Parties report on the implementation of this Recommendation in accordance with Article 16, Paragraph 1 of the Helsinki Convention;

AUTHORISES the HELCOM Response Group to adopt technical guidelines for the implementation of this Recommendation and to supplement Volume I of the HELCOM Manual on Co-operation in Combatting Marine Pollution by a new chapter regarding oil drift forecasting.

GUIDELINES FOR THE IMPLEMENTATION OF HELCOM RECOMMENDATION 24/7 "FURTHER DEVELOPMENT AND USE OF DRIFT FORECASTING FOR OILS AND OTHER HARMFUL SUBSTANCES IN THE BALTIC"

In order to assess whether a Contracting Party has implemented the Recommendation fully, partly or not at all, many different operational and technical requirements should be taken into consideration. To fully fulfill the Recommendation, the forecasting system should have the following elements and the following features:

General

- The system must be based on computerized, scientifically transparent, documented and tested models;
- The user interface of the system must be user friendly if the system is operated by response personnel;
- The results of the modeling system should be immediately available by fax, e-mail, etc., if the model is operated and calculated in research institutes, etc., remote from the accident command center;
- The first forecasts should be available instantly from the request;
- The meteorological data must be easily and rapidly available;
- Forecasts shall be available 24 hours/day.

Models

The modeling system must include at least an oil drift and spreading model, which are combined under the same interface. Other modules like chemical module, ice model, etc. can also be parts of the modeling system.

- Drift model
  - 3-D model with vertical resolution sufficient for surface spill simulation;
  - Has the possibility to take into account also wind forecasts (5 days ahead) and history (few days at least) or should be connected to some operational Baltic Sea oceanographic model (HIROMB, etc.);
  - It should be possible to update the drift forecast simulations by slick observations and improved wind forecasts during the calculation process;
  - Methods to assimilate current meter and other measured data into forecast calculation should be included in the modeling system.
- Spreading model
  - Possible to input data of most common oil types;
  - Includes the weathering processes;
  - Calculates continuously the mass balance of the oil slick.

Outputs

- Trajectories of the mass center of the slick in adjustable time steps;
- The oiled area after specified time periods;
- Possible to store the results in adjustable time steps;
- All the information preferably on sea charts;
- Information of the ice covered areas that are taken into account in drift calculation;
- Possibility to calculate also in the reverse mode for evidence to court documentation.

Resolution of the model

- At open sea approximately 1 to 5 km;
- Near shoreline and in archipelago depending on the roughness of the shoreline, type of archipelago, etc.

Additional characteristics (not for the implementation evaluation)

To make more efficient use of the models, following additional features can also be taken into account when developing modeling systems:

- To simulate the effects of oil response measures to the spreading of oil, the impact of booms, the effect of response vessels, etc. could also be incorporated to the modeling system;
- The same modeling system could also be used in connection with SAR operations due to the similarity of the forecast needs and the fact that the drift models often are used by the same personnel.

HELCOM RECOMMENDATION 24/9

Adopted 25 June 2003,
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

ENSURING ADEQUATE EMERGENCY CAPACITY

THE COMMISSION,

RECALLING the "Declaration on the Safety of Navigation and Emergency Capacity in the Baltic Sea Area (HELCOM Copenhagen Declaration)", adopted on 10 September 2001 in Copenhagen by the HELCOM Extraordinary Ministerial Meeting,

RECALLING ESPECIALLY Paragraph XI of the HELCOM Copenhagen Declaration containing the commitment of the Governments of the Contracting Parties to ensure adequate emergency capacity (fire-fighting, emergency lightering and emergency towing capacities),

BEING AWARE that in many incidents satisfactory emergency capacity and the readiness hereof have prevented serious oil spills,

CONSCIOUS of the sensitivity of the marine environment of the Baltic Sea area and of the importance it represents to the people living around it, for economic, social, recreational and cultural reasons,

RECOGNIZING that if harmful substances are introduced to this vulnerable sea they will remain there for a long time,

ACKNOWLEDGING the difficulties the Baltic Sea area presents to navigation due to narrow straits, shallow depths, archipelago areas and ice cover during winter period,

EXPRESSING concern as to the growing density of maritime traffic in the Baltic Sea area and the accidents which have taken place,

BEING CONVINCED of the need to improve the emergency and response capacities in the Baltic Sea area,

TAKING INTO ACCOUNT the findings of the consolidated version of the compilation "Emergency Towing, Fire-fighting and Intermediate Storage Capacity", according to which only the south-western part of the Baltic Sea and the St. Petersburg area have a satisfactory towing and fire-fighting capacity,

TAKING INTO ACCOUNT FURTHER that the conclusions of the above-mentioned compilation are only relating to the availability of the capacity but are not dealing with the readiness of the ships,

NOTING that Regulation 2 of Annex VII "Response to pollution incidents" to the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992 (the Helsinki Convention) encourages, as appropriate, the development of bilateral or multilateral plans for a joint response to pollution incidents,

RECOMMENDS that the Governments of the Contracting Parties keep their national inventories on emergency capacity continuously updated,

RECOMMENDS FURTHER that the Governments of the Contracting Parties ascertain a satisfactory readiness of their emergency capacity. This can for example be done by applying one or more of the below-mentioned procedures:

a) by elaborating a Memorandum of Understanding between the salvors and the responsible authority,

   i) stating the normal readiness for the resources, and
   ii) providing for an immediate exchange of information in case of changes in that readiness, as well as
   iii) possibly outlining the payment by the authority of part of the improvement costs of the salvor;

b) by investigating the possibility of drawing up bilateral or multilateral plans, under the Helsinki Convention, for certain sea areas, like the Gulf of Finland and the south-western Baltic Sea;

c) by taking into consideration, when building new ships, the possibility of installing on board satisfactory emergency capacity; or

d) by other means,

RECOMMENDS FURTHERMORE that the Governments of the Contracting Parties establish a national training and exercise programme to ensure the effectiveness of their emergency capacity,

RECOMMENDS ALSO that the Governments of the Contracting Parties report on the implementation of this Recommendation in accordance with Article 16, Paragraph 1 of the Helsinki Convention.

GUIDELINES FOR THE IMPLEMENTATION OF HELCOM RECOMMENDATION 24/9 "ENSUREING ADEQUATE EMERGENCY CAPACITY"

To be used when drawing up national implementation reports and for assessing the implementation status of HELCOM Recommendation 24/9 "Ensuring adequate emergency capacity"

1. Introduction

Recent regional and national assessment of emergency towing, fire fighting and intermediate storage capacity has shown that especially emergency towing and fire fighting capacity at sea as first-approach-operations to marine accidents are lacking in some parts of the Baltic Sea which are affected by high traffic frequency involving also a high proportion of transported hazardous cargo.

As a number of international marine accidents have shown, the lack of in-time on-scene emergency towing capacity in marine accidents increases the risk of damage to the marine and coastal environment.

Therefore, in the aftermath of the „Sea Empress" – grounding and oil pollution accident, the International Maritime Organization has presented guidelines for requirements by Emergency Towing Vessels (ETOW vessels). The same necessity exists for lightering capacity in case of damaged or grounded vessels threatening the coastline by the possible discharge of hazardous material on board, whether it may be cargo, machinery fluids, stores or bunker. In a maritime emergency all such operations including fire fighting at sea are normally executed by assisting units, in most cases SAR-, coastguard- and other response units as well as by private salvors.

During the past decades the necessity of governmental action for the provision of ETOW- capacity was not apparent because private salvage companies kept such capacity around the world at all major marine traffic risk positions in order to be close to their markets. Nowadays larger and therefore costly towage capacity is kept in operation by the owners whether it is at oil production plants, at sea or in other services world-wide. Waiting for salvage operations at a fixed position, however, is a very rare type of business today and therefore states authorities have to think how to maintain the availability of ETOW- and lightering capacity along their area of responsibility as a precautionary measure against ships' groundings and related coastal pollution.

A number of North Sea littorals and countries in other shipping areas of the world have protected specified coastal areas by ETOW vessels contracted on an annual basis or during the bad weather seasons in different stages of availability.

The aim of these guidelines is to inform on technical and operational questions that have to be taken into account when investigating the national or regional ability to respond to marine accidents by emergency towing and lightering capacity in order to protect the marine and coastal environment.

2. Areas where emergency capacity is required

In line with the findings of the HELCOM compilation on emergency towing, fire fighting and intermediate storage capacity, emergency capacity is found to be necessary especially in areas where large bulk cargo carriers like oil tankers frequently sail to loading and unloading ports and en route along high frequency shipping lanes presenting a number of navigational obstacles.

Access to emergency capacity should be provided along the areas of high risk, such as narrow traffic lanes involving high traffic and difficult navigation risks, often with weather and visibility restrictions. Emergency capacity should be tailored to regional shipping requirements (type and size, draft tank sizes, cargo types etc.). There can be different ways in which emergency capacity is being kept in place. A vessel with emergency capacity can be utilised either as patrolling, escorting

or stationed vessels. Possibilities for multi-purpose tasking of such vessels (ice breaker, patrol vessel, hydrographic survey vessel, pollution response vessel etc.) are to be examined. Economical but also reasons of higher preparedness standards of the crew speak for such multi-tasking models.

Where tank cargo is loaded or unloaded, agencies exist which can inform or even charter suitable empty tank space for lightering operations. Less capacity is required for other hazardous substances or packaged goods which perhaps need re-packing. Adequate capacity can be found at chemical production plants, terminals, refineries and specialised fire fighting services. It is advisable to prepare lists of contacts for existing equipment and pre-defined ways of access to it.

3. General requirements for ETOW vessels

For an assessment of the requirements for an ETOW vessel, inter alia, the following criteria should be examined:

- Basis port of the ETOW vessel
- Permanent or limited readiness (i.e. sailing within 1 or 2 hours)
- Speed, draught, bollard pull, manoeuvrability, endurance at sea
- Rough sea capabilities (operations possible in at least Beaufort 9)
- Modern navigation, On Scene Commander-facilities (communication and documentation equipment, etc.)
- Crew experience, training, sufficient personnel for boarding assistance
- Special features for safety (i.e explosion proof deck machinery)
- Multi-purpose tasking features

4. How to assess the necessary ETOW capacity

According to recent Baltic States' investigations the largest vessels operating in the Baltic Sea are tankers and bulk carriers of appr. 150.000 dwt. Other vessels requiring sufficient bollard pull capacity are ferries, car transporters and other RO-RO-vessels being sensitive to wind because of high perimetric side wall surface structures.

After having examined the regional, national or local requirements, decisions on suitable solutions to the above requirements are to be taken into account.

This can be i.e. the chosen status of readiness, range of operation, replacement in cases of repairs, possibility of regional or national co-operation or combination of existing capacity.

When having found the appropriate type of ETOW vessels and agencies offering access to lightering facilities, operative details in line with the identified coverage areas of risk and their varying requirements will then lead to a definition of capacity and action required.

5. Final remarks

Provision of emergency capacity is a project that involves the assessment of a number of scientific, nautical, technical and scientific data, expertise and future development. After having found the necessary capacity and the preferred type of operation, thoughts should be given to the possibility of regional or bilateral co-operation.

This is especially appropriate where countries neighbour in close vicinity to each other because this means that coverage areas of risk are either the same or very close to each other.

Such a situation will give the possibility to jointly cover an area sharing costs and amalgamating operating procedures for both sides giving economical but also operative benefits to both partners.

As transport statistics and the number of dangerous cargoes shipped in the Baltic Sea show a permanent rising tendency the provision of improved emergency capacity presents a task of rising importance for the Contracting Parties to the Helsinki Convention.

HELCOM RECOMMENDATION 28E/12

Adopted 15 November 2007
having regard to Article 20, Paragraph 1 b)
of the Helsinki Convention

STRENGTHENING OF SUB-REGIONAL CO-OPERATION IN RESPONSE FIELD

THE COMMISSION,

BEING AWARE that the increasing maritime traffic is causing a potential threat of a pollution incident at sea,

BEING ALSO AWARE that spills of oil or other harmful substances can have a long-lasting harmful impact on the sensitive marine environment and the coastal areas of the Baltic Sea,

RECOGNISING the efficiency of an operational "three tier" approach for planning and response to pollution incidents in the Baltic, whereby minor oil spills are addressed by one Contracting State, spills of medium size are addressed by well-organised and timely action by several Contracting State located in the vicinity of the accident, and the largest spills are addressed by the co-ordinated efforts of all Contracting Parties and, if necessary, with use of external assistance,

NOTING the significance of sub-regional approach to ensure timely and well-organised emergency towing, fire-fighting and lightering and, if needed, response to a pollution incident, including shoreline response, and in that way to minimise environmental damage caused by an accident,

NOTING FURTHER that sub-regional co-operation is of crucial importance when effectively using the emergency and response resources,

RECOMMENDS that the Contracting Parties take necessary steps to assess the risk of oil and chemical pollution and on that basis review emergency and response resources on a sub-regional basis in order to ensure that:

1. there are sufficient emergency resources in the area to provide adequate emergency towing, fire-fighting and lightering capacity to a ship in need of assistance within a reasonable period of time;
2. there are sufficient response resources/capacity to ensure effective collection of pollutants in case of a "medium-size" pollution incident or to control large-scale pollution incidents until the assisting forces arrive on the scene;
3. there is adequate response capacity to enable effective shoreline response,

RECOMMENDS ALSO that the Contracting Parties draw up bilateral or multilateral agreements and/or response plans for major risk areas and/or dangerous objects located in the vicinity of their borders and where co-ordinated efforts are needed to ensure adequate response to pollution incidents,

RECOMMENDS FURTHER that the Contracting States cooperate by carrying out joint surveillance operations and/or flights by one Contracting State over the responsibility area of the other Contracting State(s) in order to ensure that the minimum HELCOM requirements on aerial surveillance are fulfilled,

RECOMMENDS ADDITIONALLY that the Contracting States endeavour to do their best in order to ensure that a ship in need of assistance would be accommodated in the most appropriate place of refuge without undue delay,

RECOMMENDS FINALLY that the Contracting States integrate shoreline response into national contingency plans, and cooperate by conducting trainings and organising exchange programmes to ensure swift and adequate response capacity and to develop best practices.

GUIDANCE FOR SUB-REGIONAL PLANS TO QUANTIFY NEEDED EMERGENCY/RESPONSE RESOURCES

The idea of enhanced sub-regional co-operation, which has been discussed and agreed in HELCOM RESPONSE, rests on a four-step logic:

- Analysis of the likely accident scenarios taking into account sub-regional specifics;
- Identification (both quantitative and spatial) of the emergency and response resources needed sub-regionally to respond to an accident of Tier 1 and 2 and how to deal with a Tier 3 accident until the assistance arrives;
- Comparison of the identified needs to the available resources and development of plans to meet the needs for resources in the sub-region in the most effective way;
- By the above standing steps, achieving adequate emergency and response preparedness in the most cost-efficient way.

Even though the risks and likely accident scenarios certainly vary sub-regionally, it might be beneficial to have a general discussion on certain aspects of the assessments in order to facilitate sub-regional actions:

- Likely maximum accident for which the sub-regions should be prepared;
- Principles for the estimation of the needed emergency and response resources as well as their preparedness and spatial allocation.

Emergency towing

Every sub-region should have adequate emergency towing capacity to be able to handle the largest vessels sailing in the region in rough sea conditions (e.g. Beaufort 10-12 in the Baltic Sea).

Spatial allocation and preparedness should correspond to the time limits for approaching and securing a ship in distress along the major shipping lane(s) in the sub-region before it reaches shallow waters.

Emergency lightering

Emergency lightering capacity (pumping capacity, intermediate storing and possible places of refuge) should be analysed for a lightering operation of the biggest ships sailing in the area (up to 150,000 tonnes).

Emergency fire fighting

Emergency fire fighting capacity should ensure at least availability of Fire Fighters class 1 according to Det Norske Veritas (DNV) or similar (around 20,000 litres/minute).

Places of refuge

Based on risk assessment in a sub-regional context, including evaluation of the environmental factors, adequate response capacities should be available for places of refuge.

Shoreline response

Every sub-region should have adequate equipment and trained personnel to protect the coast, especially vulnerable habitats and areas (Baltic Sea Protected Areas, BSPAs) and to ensure immediate and appropriate action on shore.

Shoreline response capacity should be addressed and arranged in its complexity within sub-regional agreements between adjacent Contracting States. Such agreements are aimed at ensuring

fast and sharp reaction when a second and/or third tier or transboundary pollution accident has occurred.

The logic described in HELCOM Recommendation 11/13 serves as a basis to analyse and utilise the personnel, amount and type of booms, skimmers, vacuum cleaners, washers and other relevant equipment needed to maintain readiness for actual operations in such accidents.
All priorities related to vulnerable areas (BSPAs) are to be pre-planned within sub-regional action plans; this may include wildlife response as deemed feasible.

Response capacity

Response capacity should be available for responding to a 1,000- 5,000 tonnes (depending on the likely accident in the area) oil spill at sea in favourable weather within 3 days. Local geographical and other specifics (e.g. archipelago area, shallow water, etc.) should be taken into account.

Action Plan

When the above standing analysis has been performed, there should be an action plan for how together to improve the capacity. Who buys what and when? How do the others get hold of it in an emergency situation, etc.

Notification

NB -There is no need for special alarm procedures, etc. Normal HELCOM routines should be applied, but of course it is permitted to call or mail the sub-regional partners as a first notification.