South Asia Co-operative Environment Programme (SACEP)
and
International Maritime Organization (IMO)
in partnership with the
Norwegian Agency for Development Cooperation (Norad)

Project to enhance regional cooperation mechanisms on marine pollution preparedness and response in the SACEP region (Bangladesh, India, Maldives, Pakistan and Sri Lanka)

Report on the

Regional Exercise and Workshop on Oil Spill Preparedness and Response in the South Asian Seas Region.

held from

2 to 6 November 2015

Colombo, Sri Lanka

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1 Introduction

Within the framework of its Integrated Technical Cooperation Programme, the International Maritime Organization (IMO), with the assistance of the South Asian Seas Programme (SAS)/South Asia Co-operative Environment Programme (SACEP) and the Marine Environment Protection Authority (MEPA) of Sri Lanka, organized a Regional Exercise and Workshop on Oil Spill Preparedness and Response in the South Asian Seas Region.

This regional exercise and workshop took place in Colombo, Sri Lanka from 2 to 6 November 2015 with representatives from governments and industry of five beneficiary countries (Bangladesh, India, Maldives, Pakistan and Sri Lanka) within the SACEP Region.

The prevention and control of pollution from ships represents a major concern and challenge for the International Maritime Organization (IMO) Member States and forms the cornerstone of IMO's Marine Environment Programme. It is also an important component of the Organization's Integrated Technical Cooperation Programme (ITCP), which aims at assisting Member States in developing capacity for the implementation of IMO instruments at national and regional levels.

One of the main environmental objectives of the ITCP is to promote regional cooperation on marine pollution preparedness and response. In this regard, the Norwegian Agency for Development Cooperation (Norad) agreed to support the IMO's efforts by funding a specific project, under an existing framework cooperation agreement between IMO and Norad, which aims to assist the South Asian Seas (SAS) region to develop a regional cooperation mechanism for marine pollution preparedness and response. The long-term objective of the project is the effective implementation of the OPRC Convention[1] and the OPRC-HNS Protocol[2] in the SAS region.

In 1999, a Regional Oil and Chemical Pollution Contingency Plan and a draft Memorandum of Understanding (MoU) for Co-operation on the Response to Oil and Chemical Pollution in the South Asia Seas Region were discussed by the SAS countries. The final draft of the Regional Contingency Plan and of the Regional MoU were approved on 6 December 2000 at the “High Level Meeting”, prior to their formal acceptance by the Government of Bangladesh, India, Maldives, Pakistan and Sri Lanka. This Regional Contingency Plan and the objectives outlined in the MoU form the foundation on which this project aims to enhance regional cooperation.

The Regional Workshop and Exercise, the focus of this report, brought together a number of representatives from each of the five beneficiary countries, who have responsibilities within the field of marine pollution preparedness and response, including the national competent authorities. The overall aim of the activity was to evaluate the current situation or procedures in place that address regional cooperation during an incident, and to propose improvements and updates, as well as a mechanism for maintaining and further developing such cooperation, a key objective of the project. This with a view to entry into force of the Regional Oil and Chemical Pollution Contingency Plan, together with the MoU on regional cooperation in case of emergency.

[1] International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990.

[2] Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000.

1. Objectives of the Activity

This regional workshop replaced the second set of national meetings initially planned as part of Phase IV of the Project 'Enhancing regional cooperation mechanisms on marine pollution, preparedness and response in the SACEP region', in order to implement this phase work efficiently, whilst meeting the same objective. The activity consisted of a regional exercise held back to back with a regional workshop, during which the outcomes of the regional exercise were discussed.

This workshop examined the need for an update and revision of the Regional Contingency Plan based on the gaps identified during the exercise and identified the amendments that need to be made to the Plan. The workshop aimed at developing specific recommendations, in addition to identifying the national inputs needed, to complete the revision and update of the regional plan. The meeting brought together national experts from the key relevant competent national authorities of the project's beneficiary countries (Bangladesh, India, Maldives, Pakistan and Sri Lanka), with the following objectives:

- To review the findings, feedback and identified action items from the National Meetings of all five beneficiary countries, which were held between December 2014 and August 2015.
- To update the beneficiary countries on the achievements at national level in each country and evaluate any progress made within the context of the project.
- To hold a tabletop regional exercise in order to test the communication links between the beneficiary countries and assess their understanding of the Regional Plan.
- To examine liability and compensation regimes related to oil and chemical spills.
- To review case studies of major oil pollution incidents in order to identify possible gaps in the beneficiary countries national and regional contingency plans.
- To discuss key issues such as risk assessment, response strategies, resource mobilization, spill management and other important elements that need to be considered when updating the National and Regional Contingency Plans.
- To carry out a gap analysis and update of the SACEP Regional Plan, and develop an Action Plan and time-frame for this revised Regional Plan to be in place.

2. Activity Agenda

The agenda for the workshop was composed of informative and technical presentations. It also included discussions related to the project's work programme and schedule. In addition, opportunity was provided for updates on progress made in relation to national marine pollution preparedness and response from each country delegation, recognising that national response systems underpin regional cooperation planning.

1st day (2 November 2015)

The workshop began with an opening ceremony under the chairmanship of Mr. Ranjith Meegaswatti from the Sri Lankan Marine Environment Protection Authority (MEPA) who gave a welcome address proceeded by key note addresses from the following speakers:

Mr. Patali Champika Ranawake (MP)	Minister of Megapolis & Western Development	
Dr. Muhammad Khurshid	SACEP	Director General
Mr.Udaya R Seneviratne	Ministry of Mahaweli Development and Environment	Secretary
Mr. L P Jayampathy	Ministry of Ports & Shipping	Secretary
Ms. Colleen O'Hagan	International Maritime Organization (IMO)	Technical Officer
Mr. Dhammika Walgampaya	Ceylon Association of Ships Agents (CASA)	Secretary General
Mr. Anura Jayathilake	Ministry of Mahaweli Dev. & Environment	Director, Air Resources Management and IR

The various speeches emphasized the importance of the IMO-NORAD-SACEP project in addressing the risks of marine pollution in the region and the need for collaboration and cooperation when faced with a pollution incident. Appreciation was expressed for the project sponsors and coordinators in facilitating the gathering of the key players in pollution response within the project's beneficiary countries so that they could work together in person and utilise this opportunity to discuss areas of further collaboration and knowledge sharing. The overall importance of protecting the marine environment was highlighted and in this connection, a short film produced by UNEP on marine litter was aired.

The opening ceremony concluded with the lighting of a traditional oil lamp to inaugurate the workshop.

The opening ceremony was followed by a technical session, which began with a presentation of the IMO-NORAD-SACEP Project by the SACEP project focal point. The project's lead consultant then made an introductory presentation to cover the current status and levels of preparedness in the region, the activities undertaken by the project to date, and the main objectives of the exercise and workshop.This was followed by presentations from the national consultants of each of the beneficiary countries, who summarised the national workshops held by the project in their respective countries and any subsequent progress made in the field of preparedness for response to a pollution incident. Summaries of the presentations can be found in section 4 of the report below.

2nd day (3 November 2015)

Technical presentations on day 2 allowed IMO, ITOPF and OSRL, in addition to the project's lead consultant, to share their experiences with key oil spill preparedness, response and cooperation issues, including:

- Regional planning;
- Elements to consider when preparing for and responding to an oil spill;
- Risk assessment, response strategy;
- Spill response case studies;
- Claims and compensation; and
- Management, mobilization and demobilization of overseas resources.

Each presentation was well received and generated a lot of discussion, in particular relating to liability, claims and compensation following a marine pollution incident. Several countries highlighted their concerns regarding the potentially protracted timeframe to recover any compensation as well as the administrative burden involved with this process. This lead to discussions on the establishment of national funding mechanisms to address the shortfall of funds in the event of an oil pollution incident.

The day ended with a summary of the current version of the regional contingency plan for pollution response as agreed by the five countries, in order to provide some context and background to support the exercise planned for the following day.

3rd day (4 November 2015)

The morning session of day 3 was allocated to the implementation and debrief of a tabletop exercise to test and evaluate the current version of the regional plan. This concluded with the participating country delegations recognising a need for the update of the Regional Plan, but also for further exercises, both tabletop and field based, in order to become more familiar with the communications procedures outlined in the plan.

The tabletop exercise was directed by the project's lead consultant, with assistance from IMO, OSRL and ITOPF and was based on the implementation of the POLREP communication system as outlined in the regional plan. The scenario used during this session is outlined in Annex 4. The main aim of this session was to review the regional plan with the help of a role-playing activity and evaluate the procedures of communication for regional and international cooperation. It was beneficial in highlighting the various issues to be considered when implementing the regional plan and some of the challenges that might arise. The discussion surrounding the exercise also highlighted the strong level of regional cooperation already in place in the region, particularly with regards to at sea operations predominantly in search and rescue. It was also highlighted that there was significant efforts being made by India in coordinating response activities in the region, where they have held joint at sea operations with a number of their regional partners to test operational procedures and arrangements.

The exercise was followed with a site visit to the Port of Colombo, organised by MEPA, to demonstrate and observe oil spill response vessels and response equipment stockpiles based there. This site visit and equipment demonstration was very much appreciated by the participants, particularly those currently involved with developing their own national equipment stockpiles, who took the opportunity to find out more about the maintenance, storage and logistic requirements associated with various types of equipment.

4rd day (5 November 2015)

The review and update of the SACEP Regional contingency Plan, a gap analysis and preparation of an Action Plan for the completion of the update and future maintenance and implementation of the plan was the main objective of day 4. In this connection, an interactive session was held with the active contribution of the participants. The gaps found and corrections needed to the contingency plan were discussed, agreed and recorded, and have been outlined in Annex 5 and incorporated into the plan as shown in Annex 7.

5th day (6 November 2015)

The review and update of the Regional Contingency Plan continued into day 5, which concluded with the development and adoption of an action plan, comprising both regional and national components to facilitate and expedite the finalization of the update of the regional plan. During the development of the action, the future maintenance and implementation of the plan, and the potential role for SACEP in this aspect, were explored, as well as the issues remaining issues or challenges that the project might focus on. The Action plan as agreed can be found in Annex 6. As outlined in the Action Plan, the workshop participants highlighted the need for consultation with the SACEP Governing Council in respect to any amendments or updates to the Regional Plan, in addition to any additional roles and responsibilities to be undertaken by SACEP. The main area for consideration by the SACEP Governing Council is to agree to the responsibility for maintaining and updating of the plan to be provided to the operational authorities implementing the plan who will seek consensus for any proposed amendments, therefore terminating the need for constant approval by the SACEP Governing Council, whose meetings are infrequent.

As a result of the lengthy discussions throughout the workshop, due to the high interest level in the topics covered, the workshop overran its allocated timeframe and therefore concluded with a short closing ceremony with addresses given by MEPA, IMO and SACEP. All speakers expressed their gratitude to the participants of the workshop for their very active participation and to the project sponsors for facilitating the activity.

3. Location, Dates and Participants

The meeting was held in Colombo, Sri Lanka at the Galadari Hotel from 2 to 6 November 2015.

Each of the five beneficiary countries involved in the project were represented by a delegation comprising a minimum of three persons. These country delegations included key personnel from those Ministries or Governmental Agencies involved in oil spill preparedness and response issues i.e. the competent national authorities.

In addition to the SACEP Secretariat, IMO and a number of international organizations were represented at the meeting. This enabled the sharing of experiences from other regions, particularly on day 2 during the technical symposium.

A full list of the meeting's 34 participants is provided in Annex 2

4. Summary of Presentations

The full presentation material used in each session, as well as key reference documents and the agreed amendments to the regional plan in addition to the agreed action plan was distributed to all participants at the close of the meeting on USB stick and is retained on file by the SACEP Secretariat.

4.1. SACEP Presentation

Pulakesh Mondal, Senior Programme Officer from South Asia Cooperative Environment Programme (SACEP) made a presentation which covers the objectives of the project in general and the specific objectives of this workshop. He briefly presented the outline of the project starting from the first activity. He mentioned the importance of the national workshops and designated

national authorities and focal points within the countries. He underlined the risk of oil and chemical spills in the region. He presented the steps taken and historical background for the regional contingency plan and MoU for the region. He mentioned the great achievement on the signature of the MoU by the beneficiary countries and the supportive role of the SACEP as a secretariat. He finalized his presentation by indicating the general provisions of MoU and Regional Plan.

4.2. Presentations by National Consultants

Bangladesh

Dr. Md. M. Maruf Hossain introduced current developments in Bangladesh referring to the recent oil spills in the country as a key motivation factor. He summarised the national workshop and its outcomes, held on 5-6 August 2015. In particular, he described the high level of attendance at their workshop, over 100 participants from a wide range of government ministries, departments and agencies. The main outcomes were a realization of the need for a centralized and coordinated approach to spill response, i.e. the development of a National Oil Spill Contingency Plan (NOSCP), which currently does not exist. The National consultant had been tasked with developing a draft NOSCP within one month of the workshop, he completed this and the draft currently rests with the Ministry of Environment and Forests (MOEF) for their consideration. He concluded by underlining that there is a need for a support and cooperation with SACEP and IMO for a successful implementation of effective preparedness and response to marine pollution in the country.

Maldives

During the country presentation, the vulnerability of Maldives was highlighted because of its unique distinct features such as its complex geography comprising 1,190 Islands (200 inhabited) and a disparate administrative arrangement, posing a unique challenge with respect to building preparedness and response capacity for marine pollution incidents. Given the almost entire dependence of the economy on fisheries and tourism they are well aware of the risk posed by international shipping passing close to their coastline. Following the National workshop in Male, the Maldives National Defense Force are making progress in further developing their current oil spill contingency plan, which was not sufficiently comprehensive. They are working on a tri-lateral security agreement with India and Sri Lanka to strengthen their response planning. Furthermore, the regulatory mechanism assigning responsibility for disasters has been resolved with the recent passing of the National Disaster Management Act, which hopes to clarify the decision-making and management of a response. Again, quite significant progress is currently underway.

Pakistan

Captain Fiaz Hussain introduced the National Marine Disaster Contingency Plan (NMDCP), National Contingency Plan on pollution and the organizational levels of preparedness in Pakistan. He mentioned the responsibilities and duties of the relevant authorities in case of a maritime pollution and the national contingency plans for pollution, SAR and salvage. He also introduced the national workshop held on 12-13 January 2015 and he gave information about the gaps in the national system identified during the workshop and the subsequent recommendations to resolve these.

India

Dr. Ramasamy Venkatesan presented the national situation in India. He introduced the national workshop held on 2-3 February 2015 with 46 participants and 32 organizations. He mentioned the national oils spill training scheme and the exercises held in India. In addition, the national plan and inventory was introduced. The importance of sharing of expertise and resources among SAS countries and preparation of risk mapping of sites along Indian Coast was underlined, as well as India's commitment to enhancing and facilitating regional cooperation in marine pollution preparedness and response, providing examples of their activities in this regard.

Sri Lanka

Mr. Jagath Gunasekera presented the National Oil Spill Contingency Plan of Sri Lanka and gave examples of spills that occurred in their waters. He introduced the national legislation and the responsible authorities during an oil spill. He also mentioned the national workshop held in Sri Lanka on 16-17 December 2014 and introduced the main outcomes and recommendations from this workshop. He pointed that the oil spill response capabilities in the region have not been adequately strengthened to manage this risk and recommended that individual countries capability should therefore be developed to address this risk and that regional mechanics should be strengthened.

4.3. IMO Presentation

Colleen O'Hagan from IMO made a presentation on Regional Planning. She outliend IMO's role and the importance of OPRC Convention and OPRC-HNS protocol. She also provided a summary of the UNEP Regional Sea's Programme and the regional agreements in force. She described the MoU for Cooperation on the Response to Oil and Chemical Pollution in the South Asia Seas and the fundamental principles of the memorandum. She presented the structure of a national and a regional contingency plan in detail and described the relation between regional and national plans and the key points to bear in mind for the preparation of these plans.

4.4. OSRL Presentations

Arti Chopra from OSRL made two presentations. In her first presentation, she covered the risk assessment for oil spill response. Firstly, highlighting the definition of risk and then underlining the importance of reducing likelihood and reducing the consequence of a pollution incident. She introduced the steps of risk assessment study and the relation of tiered approach to response. She discussed the tiered preparedness and response approach used by OSRL and gave brief information on the concept of net environmental benefit analysis when examining spill response strategies including shoreline clean up. In her second presentation, she discussed the mobilization, coordination, management and demobilization of spill response resources from overseas and common challenges faced in this process.

4.5. ITOPF Presentations

Dr. Nicola Beer from ITOPF made two presentations. In her first presentation, she introduced the ITOPF activities and defined the main challenges in response to major oil spills. She introduced the key elements to be considered in the management of major spill responses. She also gave detailed information about the responses to Prestige, Hebei Spirit and MSC Napoli accidents and the lessons learned from these incidents. In her second presentation, she covered the established international liability and compensation regime for oil spills in place, providing detailed information on the relevant international conventions, claims procedures and the importance of record keeping.

5. Conclusions

The benefits of the regional exercise and workshop were numerous. The various delegations were very engaged and interested in the topic and project, and either keen to assist their regional partners in building preparedness and response capacity for marine pollution response or keen to find out how other countries in the region are approaching this challenge. There was a lot of knowledge sharing, detailed discussion and offers of assistance made amongst the participants. The advantage and future value of regular meetings of the national operational authorities was very clear, as referred to in the action plan.

In relation to the IMO-NORAD-SACEP Project, the requirement for consultation with the SACEP Governing Council in relation to amending or updating the Regional Contingency Plan, as outlined by the participants of the workshop, was not previously incorporated within the project proposal. Therefore, the updated plan as agreed by the delegations represented at the workshop, in addition to their recommendations for the future maintenance and implementation of the plan and the corresponding role of SACEP will be raised at the next planned meeting of the SACEP Governing Council.

Annex 1 - Agenda

REGIONAL EXERCISE AND WORKSHOP ON OIL SPILL PREPAREDNESS AND RESPONSE IN SOUTH ASIAN SEAS REGION

2 - 6 November 2015, Colombo, Sri Lanka

Programme

Day 1. Monday 2nd November 2015

08h30 Arrival and Registration

Opening Ceremony

09h00 Short film on Marine Environment (prepared by SACEP)
Welcome Address: Director General SACEP
Opening remarks: IMO – Colleen O'Hagan
Opening Remarks: Chairman, MEPA
Opening Remarks: Chief Guest
Group photo

09h45 **Coffee and Refreshment Break**

10h15 **Presentation of the SACEP - NORAD Project**
Pulakesh Mondal, Senior Programme Officer (Regional). SACEP

Introduction of Regional Exercise & Workshop

10h30
George Franklin – Project Consultant
- Overview of current status and levels of preparedness in Region
- Objective of workshop and programme
- Introduction of the participants
- Introduction of the facilitators

11h15 **National Workshops - Summary and Action items**
- Introduction
George Franklin – Project Consultant

- Summary of key points highlighted during workshop

	- Summary of action items agreed - Expectations from the Regional Plan
11h30	**- Bangladesh** *National focal point / consultant*
12h00	**- India** *National focal point / consultant*
12h30	**Lunch Break**
	National Workshops - Summary and Action items
13h30	**Maldives** *National focal point / consultant*
14h00	**Pakistan** *National focal point / consultant*
14h30	**Sri Lanka** *National focal point / consultant*
15h00	**Coffee and Refreshment Break**
15h30	**Summary of National workshops** *George Franklin – Project Consultant*
16H00	**Regional Planning** *Colleen O'Hagan - IMO*
16h30	**Summary of Day 1 and Introduction to Day 2** *George Franklin – Project Consultant*
	Day 2. Tuesday 3rd November 2015
09h00	**Summary of objectives of Day 2** *Colleen O'Hagan - IMO*
09h05	**Overview of elements of consider when preparing for and responding to a spill incident** *George Franklin – Project Consultant*
09h45	**Risk Assessment, Respose Strategy and Options in spill response** *Arti Chopra - OSRL* - Risk assessment considerations - Response techniques

10h30	**Coffee and Refreshment Break**
11h00	**Spill response case studies** *Dr. Nicola Beer - ITOPF* - Common challenges - Benefit of bi-lateral and multi-lateral cooperation
11h45	**Mobilisation, Coordination, Management and Demobilisation of Spill response resources from overseas** *Arti Chopra - OSRL* - Considerations and Common Challenges
12h30	**Lunch Break**
13h30	**Claims and compensation** *- ITOPF* - International Compensation Conventions - Practical application - Common challenges - Bi-Lateral, Multi- Lateral Response
14h15	**Overview of Regional Oil And Chemical Pollution Contingency Plan for South Asia** *George Franklin – Project Consultant* - Introduction - Policy and Responsibility - Response Elements and Planning
15h00	**Coffee and Refreshment Break**
15h30	**Overview of Regional Oil And Chemical Pollution Contingency Plan for South Asia Contd.** *George Franklin – Project Consultant* - Response Operations - Reporting - Administration, Logistics and Funding - Public Information
16h30	**Summary of Day 2 and Introduction to Day 3**

George Franklin – Project Consultant

Day 3. Wednesday 4th November 2015

09h00 **Summary of objectives of Day 3**
Colleen O'Hagan - IMO

09h10 **Introduction to Tabletop Exercise**
George Franklin - Project Consultant

09h25 **Tabletop Exercise commences**
- Testing POLREP Communications System
- Facilitated discussion on activation of Regional Plan
- Claims and compensation issues

10h30 **Coffee and Refreshment Break**

11h00 **Tabletop Exercise continues**

12h30 **Lunch Break**

13h30 **Exercise summary and overview**
George Franklin - Project Consultant

14h00 **Exercise debrief and discussion**
National representatives

15h00 **Coffee and Refreshment Break**

15h30 **Review of Regional Plan - Update and Gap Analysis**
George Franklin - Project Consultant

16h30 **Summary of Day 3 and Introduction to Day 4**
George Franklin - Project Consultant

Day 4. Thursday 5th November 2015

09h15 **Review of Regional Plan - Update and Gap Analysis Contd.**
George Franklin - Project Consultant

10h30 **Coffee and Refreshment Break**

11h00	**Review of Regional Plan - Update and Gap Analysis (Cont'd)** *George Franklin - Project Consultant*
12h30	**Lunch Break**
13h30	**Site visit organised by MEPA** - Port Authority - Ceylon Petroleum
16h30	**End of Day 4**

Day 5. Friday 6th November 2015

09h00	**Summary of objectives of Day 5** *Colleen O'Hagan - IMO*
09h15	**Development of Regional and National Action Plans for the update of the Regional Contingency Plan** *George Franklin - Project Consultant* - Facilitated discussion and group work
10h30	**Coffee and Refreshment Break**
11h00	**Presentation and adoption of Regional Action Plans** George Franklin - Project Consultant
11h30	**Presentation and adoption of National Action Plans** Representatives from each member state
12h30	**Lunch Break**
13h30	**Closing Ceremony** Closing Remarks: MEPA Closing Remarks: SACEP Evaluation Questionnaires
14h00	**End of Workshop**

Annex 2 - Participant list

NO	COUNTRY	NAME OF DELEGATE	DESIGNATION	INSTITUTION & ADDRESS
1	Bangladesh	Mr. Mohammad Mokbul Hossain	Director (Deputy Secretary)	Director Department of Environment Chittagong Divisional Office Zakir Hossain Road, Khulshi, Chittagong
2	Bangladesh	Mr. Md. Saidur Rahman	Deputy Secretary	Ministry of Environment and Forests (MOEF) Bangladesh
3	Bangladesh	Dr. Md. M. Maruf Hossain	National Consultant, National Oil Spill Contingency Plan, Dep. of Env.	Institute of Marine Science and Fisheries University of Chittagong, Chittagong-4331 Bangladesh
4	Bangladesh	Mr. Mohd. Reazur Rahman	Pilot	Mongla Port Authority. Mongla,Bagerhat-9351. Bangladesh
5	Bangladesh	Mr. Md. Mustafizur Rahman Akhand	Deputy Director (Lab) Dhaka Laboratory	Department of Environment Paribesh Bhaban, E/16 Agargoan Sher-e-bangla Road, Dhaka-1207 Bangladesh
6	India	Dr. Venkatesan Ramasamy	Scientist G & Head	Ocean Observation Systems National Institute of Ocean Technology Ministry of Earth Sciences Chennai 600100 India
7	India	Dr. Roop Singh Kankara	Scientist-F	Head, Coastal Processes & Shoreline Management Group, ICMAM- Project Directorate, Ministry of Earth Sciences, Govt. of India, NIOT Campus, Pallikaranai, Chennai - 600 100, India

No	COUNTRY	NAME OF DELEGATE	DESIGNATION	INSTITUTION and ADDRESS
8	India	DIG Anish Arvind Hebbar	Principal Director (Environment)	Coast Guard Headquarters, National Stadium Complex, New Delhi – 110 001 India
9	Maldives	Mr. Mohamed Abdul Nasir	Deputy Director General	Transport Authority Male', Maldives
10	Maldives	Mr. Mohamed Imthiyaz	National Maritime Consultant	Transport Authority of Maldives, Ministry of Economic Development, 11th Floor, Velaanaage, Ameer Ahmed Magu, Male’
11	Maldives	Ms. Mariyam Rifga	Assistant Director	Environmental Protection Agency 3rd Floor, Green Building Handhuvaree hingun, Male’ , Republic of Maldives
12	Maldives	Mr. Mohamed Shafee	S. SGT	MNDF Coast Guard
13	Pakistan	Mr. Zia Ul Islam	Director (EIA/Mont)	Pakistan Environmental Protection Agency (Pak-EPA) Ministry of Climate Change, Government of Pakistan,Plot # 42, Street 6, Sector H-8/2 Islamabad-44000, Pakistan
14	Pakistan	Capt. Fiaz Hussain TI(M) PN	Deputy Chief (Maritime), Ministry Of Defence	Ministry Of Defense (MOD), Maritime Affairs Wing Rawalpindi, Pakistan
15	Pakistan	Cdr. Yasir Hayat Khan	Commanding Officer, Pakistan Maritime Security Ship (PMSS) Barkat	Pakistan Maritime Security Agency, Plot No 34-A, Dockyard Road Karachi, Pakistan
16	Pakistan	Lt Kashif Hussain	Officer Incharge Pmsa Base Gwadar	Pakistan Maritime Security Agency, Plot No 34-A, Dockyard Road Karachi, Pakistan

No	COUNTRY	NAME OF DELEGATE	DESIGNATION	INSTITUTION and ADDRESS
17	Consultant	Mr. George James Franklin	Executive Director	Franklin Marine Limited, Bay Tree House, The Spinney, Bassett, Southampton, SO16 7FW, UK
18	Resource Person	Ms. Colleen O'Hagan	Technical Officer	International Maritime Organisation 4 Albert Embankment, London, UK, SE1 7SR
19	Resource Person	Dr. Nicola Anne Ham	Technical Adviser	ITOPF Ltd, 1 Oliver's Yard, 55 City Road, London, UK EC1Y 1HQ
20	Resource Person	Ms. Arti Chopra	Spill Response Specialist	Oil Spill Response Limited Loyang Offshore Supply Base, 25C Loyang Crescent, Block 503 TOPS Avenue 3, Singapore 506818
21	Sri Lanka	Dr. Terny Pradeep Kumara	General Manager	Marine Environment Protection Authority (MEPA) No.758, 2nd Floor, Baseline Road, Colombo 09, Sri Lanka
22	Sri Lanka	Mr. Jagath Gunasekera	National Consultant / NOSCP	Marine Environment Protection Authority (MEPA) No.758, 2nd Floor, Baseline Road, Colombo 09, Sri Lanka
23	Sri Lanka	Mr. H. T. Nilantha Piyadasa	Asst. Manager (Operation)	Marine Environment Protection Authority (MEPA) No.758, 2nd Floor, Baseline Road, Colombo 09, Sri Lanka

No	COUNTRY	NAME OF DELEGATE	DESIGNATION	INSTITUTION and ADDESSS
24	Sri Lanka	Mr. Neel Priyadarshana	Asst. Manager (Ship Survey)	Marine Environment Protection Authority (MEPA) No.758, 2nd Floor, Baseline Road, Colombo 09, Sri Lanka
25	Sri Lanka	Mr. S. A. R. Jayathilake	Chief Fire Officer	Sri Lanka Ports Authority #19, Church Street, Colombo 01, Sri Lanka.
26	Sri Lanka	Lt. Commander C. M. H. Jayalath	Senior Staff Officer (Marine Conservation and Monitoring)	Sri Lanka Navy Headquarters
27	Sri Lanka	Mr. T. W. K. Indika Pushpakumara	Assistant Director	Disaster Management Center
28	Sri Lanka	Mr. Anura Jayatilake	Director (ARM & IR)	Ministry of Mahaweli Development and Environment
29	Sri Lanka	Ms. T. K. I G. Kumari	Programme Assistant	Ministry of Mahaweli Development and Environment
30	Sri Lanka	Commodore Ajith Samarasinghe	Deputy Director General	Sri Lanka Coast Guard
31	SACEP	Ms. Jacintha S. Tissera	Administrative Officer	South Asia Co-operative Environment Programme, No. 69/4, Maya Avenue, Colombo 06, Sri Lanka
32	SACEP	Mr. Pulakesh Mondal	Senior Programme Officer (Regional) – SASP	South Asia Co-operative Environment Programme, No. 69/4, Maya Avenue, Colombo 06, Sri Lanka
33	SACEP	Ms. Harshanamali Wijayawardhana	In-charge Front Office Management / Secretary	South Asia Co-operative Environment Programme, No. 69/4, Maya Avenue, Colombo 06, Sri Lanka
34	SACEP	Mr. Dinendra Thilaka	Database Assistant / Secretary	South Asia Co-operative Environment Programme, No. 69/4, Maya Avenue, Colombo 06, Sri Lanka

Annex 3 - Presentations by National Consultants

NATIONAL WORKSHOP ON NOSCOP INITIATIVES BY SACEP AND THE OUTCOMES BANGLADESH CONTEXT

By

Dr. Md. M. Maruf Hossain
National Consultant,
NOSCOP initiatives in Bangladesh.
marufimsfcu@gmail.com

will be presented in "**The Regional Training & Exercise for Oil Spill Preparedness and Response under 'Enhancing Regional Co-operation Mechanisms on Marine Pollution Preparedness and Response in the SACEP Region'**

- **02 to 06 November 2015**
- **Colombo, Sri Lanka**

Feature	Recent Oil Spillage in Bangladesh	
		
Location	Shela River, Sundarbans, Khulna District, Bangladesh	Bengura, Boalkhali Upazila, Chittagong, Bangladesh
Coordinates	22°21′50.57″N 89°40′1.34″ECoordinates: 22°21′50.57″N 89°40′1.34″E[1]	22°20.722″N 091°56.988″ECoordinates: 22°20.729″N 091°56.985″E[1]
Date	9 December 2014	19 June 2015
Cause	Collision between oil tanker and cargo vessel	Rail bridge collapsed.
Oil Carrier	MS Harun & Co.	Bangladesh Railway.
Volume	350,000 litres (77,000 imp gal; 92,000 US gal)	Around 90000 litres
Area	350 km² (140 sq mi)	Spread across 20 km of the Canal and Karnaphuli River

NATIONAL WORKSHOP ON NOSCOP INITIATIVES BY SACEP AND THE OUTCOMES BANGLADESH CONTEXT.

- **First Nat. Consultation Workshop on NOSCOP-Bangladesh initiatives was held on 5-6 August, 2015 at CIRDPAP, Dhaka.**
- **Nat. Consultation Workshop - part of the national activity , agreed in regional meeting in Colombo, 26-28 Feb.,2014, by the national authorities of SAS Country.**
- **Obj. of the Workshop: to identify the stakeholders and capable organizations / resource persons etc. in order to prepare a National Oil Spill Contingency Plan for Bangladesh.**
- **In addition to SACEP representative & Lead Consultant, representatives, resource persons from 26 organizations/ministry participate in the workshop, which includes:**
- **MoEF, DoE, BN, BCG, BSC, DoS, MPA, CPA, Fire Service & Civil Defence, BPC, BIWTA, BITC, Oil Companies (Eastern Refinery, Meghna, Jamuna etc), IMSF,CU, Bangladesh Railway, EGCB (Power Div.), Representative from PM office, NBR, including a good number of electronic and print media peoples.**

NATIONAL WORKSHOP ON NOSCOP-BD.

Inaugural session:

- Chaired by DG, DoE , Secretary and Add. Secretary, Min. of Env. & Forest, GoB were present as Chief guest and special guest.
- Nat. Counterpart of NOSCOP- Bangladesh Mr. Mokbul Hossain, welcomed distinguished participants .
- Highlighted SACEP & IMO activities on completing preparation of a regional contingency plan for the South East Asian seas region.
- As part of it, various milestones have been achieved, between 1999 and 2000, with participation of countries such as India, Pakistan, Sri Lanka, Maldives and Bangladesh. In 2010, a MoU was signed as result of those steps.
- As a partner country of the MoU, Bangladesh has promised to recognize the importance of marine ecosystem and keep it safe.
- He mentioned, If recent incident of oil spill at Shela River taught anything, it is that there is a gap of coordination between ministries of the country.
- He hoped the workshop would provide concrete suggestions on identification of the stakeholders, the way forward for preparing National Oil Spill Contingency Plan in line with the objectives and components of the South Asia Seas Strategy.

NATIONAL WORKSHOP ON NOSCOP-BD.

- Mr. Pulakesh Mondal, Sr. Progm. Officer, SACEP in his presentation, first gave a brief on the Sunderbon mangrove forest, world heritage, its national-regional significance & consequence of oil spillage - 9th December, 2014.
- Pointed objectives of Nat. Workshop & background of SACEP initiatives, role, functions of SACEP for capacity development in SAS country including Bangladesh , field of Oil/Chemical Pollution Contingency plan and its preparedness.
- Outlines risk & consequences of oil spillage in human health & biota.
- Also outlined the guiding principles of an oil spill, its responses and management, status of ratification in SAS member country.

NATIONAL WORKSHOP ON NOSCOP-BD.

- Mr. Nurul Karim, Sp. Guest, expressed his sincere thanks to the organizer for arranging the workshop as it is now the demand of time.
- He mentioned experiences of handlings two accidents of oil spill triggered need of the country for a national oil spill contingency plan, as no plan exists now.

- Dr. Kamal Uddin Ahmed, Chief guest welcomed the distinguished participants and thanked DoE. He mentioned that preparation of oil spill Contingency Plan is very important.
- **He asserted we do not have the necessary facility to tackle oil spills.**
- **We suffer from confusion on what to do and what not to do.**
- **We need to learn and assess the net environmental benefit analysis.**
- **There is a need to wake** up. 90% trade of the country depends on Bay of Bengal.
- **Bangladesh should have exclusive national oil spill contingency Plan**. Although immediate response for a long-term strategy is required, **unfortunately no well-organized system exists**.
- He thanked SACEP secretariat for their generous support and collaboration. He hoped that the initiatives would go a long way.

National Workshop on NOSCOP-BD.

- Technical Session started with presentation by Mr. George, J. Franklin on "Project updates, objectives and review of the progress on decision taken during meeting of the national authorities in Colombo, 26-28, February, 2014".
- He gave **background, objectives, both short & long term, purposes & scope of SACEP project, policy and responsibility relation to harmonize national plan with that of regional plan.**
- He gave an overview of SACEP regional plan.
- Highlighted basic principles for formulation of Contingency plan, like management structure, risk assessment, sensitivity mapping, identification of personal & equipment, training flexibilities required for plan, exercise to verify plan & competency of employed personal.
- Showed action items need to follow, after first meeting by the national authority.
- Recommended a good plan should have command structure, planning operation, logistics, financial, legal & public relation.

National Workshop on NOSCOP-BD.

- Nat. Consultant, Dr. Md. M. Maruf Hossain shows background initiatives by SACEP & significance considering national, regional & global context.
- Cited rich, economically important, ecologically sensitive marine & protected area (eg. Sundarban mangrove forest, St, Martin's coral island & others).
- Citing examples of two recent oil spillage incidences, revealed that, lacking of coordinated effort, lack of practical experience & inefficiency to response & combats such oil spillage situation by agencies, as he said.
- proposed an outline of the preparation of National Oil Spill Contingency Plan.
- Emphasized establishment of 'National Marine Environmental Protection Authority'(NMEPA).
- identified institution who will be included in this plan. Main institutions are: Bangladesh Navy, Bangladesh Shipping Corporation, Marine Fisheries, Department of Environment, Bangladesh Coast Guard, Bangladesh Inland Water Transport Authority, Civil Aviation and Civil Defense Authority and so on.

National Workshop on NOSCOP-BD

- Mr. Md. Zafar Alam, Member (administration & planning), CPA presented a paper entitled, "**Legal basis and its potential strength and threat analysis of NOSCOP preparation**".
- In his presentation, he said on spill program, its proximity, status of Bangladesh, **considering responsibility, capacity, lack to deal oil spill incidence**,
- **Question on who will lead, allocation of business, implementation of NOSCOP** i.e. **legal, Institutional & capacity, relevant rules, regulation & different national & institutional Act, fit with implementation of NOSCOP-BD.**
- **He urged, plan be practical , need based** & certified by registered profession engineer

National Workshop on NOSCOP-BD.

- Before open discussion, Mr. G. Franklin gave another presentation in afternoon session of the workshop.
- He showed video on **Montra and Macondo incidence** and its implication in Industrial (oil) sector,
- good practices, including **pros-cons of uses of dispersants**, **in-situ burning,**
- **importance on uses of EBA (Environmental Benefit Analysis),**
- Recommended '**Arpel**' an example of simple but a standard plan to follow for preparation of a national plan.

Open discussion session: Nat. Workshop

The participants from different organizations took part in the discussion and commented on which organization should play the lead role.

- S.M Nazmul Haque, Engineer, Ship Surveyor & Examiner said , surveyors & auditors can not do much during oil spill disasters for lack of **skilled manpower & appropriate instrumentation**.
- Underlining need **to recognize a central command,** he suggested **ship survey activities should be centralized**.
- Khorsheda Yesmin, DS, MoEF said **as oil spill pollution is related to environment, MoEF should be the leading ministry**. She proposed **to identify the ministry as leading authority rather than department**. Moreover, **disaster management committee can play an important role.**
- Roksana Tarannum, SAS, MoEF, mentioned the work must be a collaboration of different departments where **the Ministry of Shipping can play central role for availability of capacity, manpower and booms.**

Open discussion session: Nat. Workshop

- Dr. Golam Sorower, Ministry of Land emphasized on choosing **the responsible agency with accuracy, coordinating for on-time action & appropriate reporting and communication measures be taken during disaster.**
- **Captain Nazmul Alam, Deputy Conservator (Marine), Chittagong Port Authority, emphasized on previous funding sanctions to prepare plan.** He strongly suggested avoiding the system of tender.
- Akhtar Uz Zaman, DGM, POCL, put forward the opinion **that DoE should work as focal point on oil spills & coast-guard will be the striking force**.
- Md. Amir Hosain Chowdhury, DFO, Ban Bhaban, Dhaka stressed importance to protect Sundarban which is near to Mongla port. He was concerned about the increased vulnerability of the forest caused by the port.
- With few exceptions majority of participants expressed **their consent in favor of DoE as the leading institution & central coordinator in case of crisis**.
- **Bangladesh Navy & Coast Guard can be leaded as the operating partners.** Finally the was ended with vote of thanks by Dr. Sultan Ahmed.

KEY THEMES (ACTION ITEMS/GAPS):

Forming competent nat. authority, nat. Contingency plan be formed immediately **to harmonize with regional plan** and other national plan of SAS country.

- **By one month a draft Nat. Contingency plan should be prepared.**
- Macro-interest (national) should given more emphasis than micro interest,
- **Regular meeting/interaction with relevant resource persons/stakeholders to act as a complete team for mock drills/training exercise on such oil spill, rescue, combat operation.**

KEY THEMES (ACTION ITEMS/GAPS):

- **Gaps identified to awareness** and **inter-agency & inter-ministerial communications among the relevant stakeholders.**
- **Dire need of capacity building in terms of men & materials on oil/chemical spillage response,**
- All **relevant institution should incorporate contingency plan & support (tier-1 level) in their institutional practices & rule.**

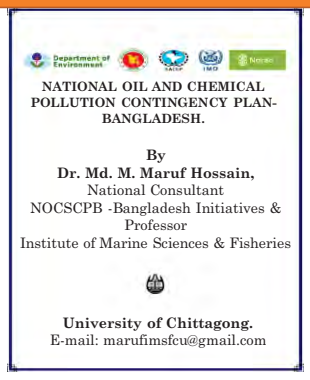
KEY THEMES (ACTION ITEMS/GAPS):

- **Government should ratify relevant multilateral convention, protocols relevant to marine/oil pollution & relevant issues.**
- **Preparation of risk mapping, vulnerable sites along the coast, including trajectory maps could be utilized,**
- **Expertise on SWOT/SOPs analysis should be evolved,**
- **Sharing of expertise and resources among the South Asian country,**
- **Safeguard legal issues to the respective country.**

BRIEF ON THE DRAFT NAT. CONTINGENCY PLAN- BANGLADESH.

- A draft "National Oil and Chemical Pollution Contingency Plan-Bangladesh" were prepared synchronize with regional plan & submitted to National Authority (MoEF/DoE, GoB) within one month after the national workshop.
- with intention to open access by all relevant govt. dept./ministry, industry, private and public companies, entrepreneurs, including civil society etc. in working closely to develop a comprehensive, practical national plan.

National Contingency Plan (Draft Copy)



NATIONAL OIL AND CHEMICAL POLLUTION CONTINGENCY PLAN-BANGLADESH.

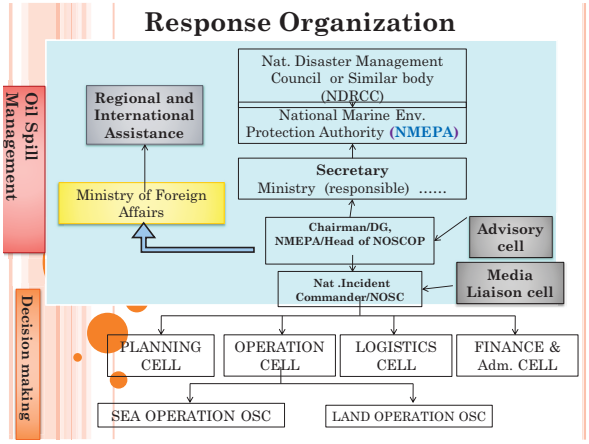
By
Dr. Md. M. Maruf Hossain,
National Consultant
NOCSCPB -Bangladesh Initiatives &
Professor
Institute of Marine Sciences & Fisheries

University of Chittagong.
E-mail: marufimsfcu@gmail.com

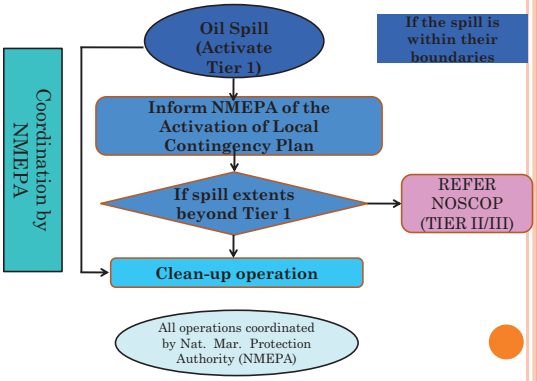
Main Content of NOSCOP-BD Draft Copy

1. **Introduction**
2. **Response Management**
3. **Policies & Preparedness**
4. **Response**
5. **Preventive Measures to Reduce Oil/Chemical Spills.**
6. **Reporting, Communication, Legal & Finance**

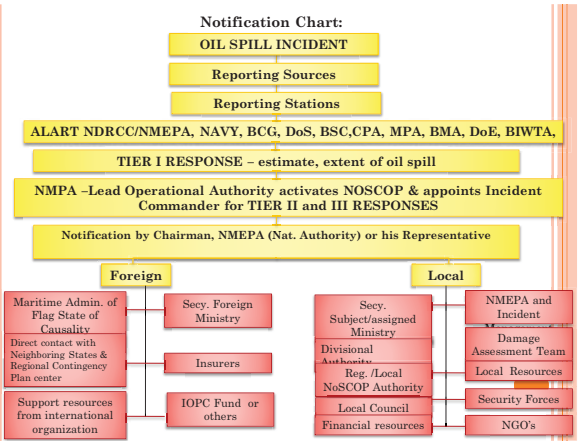
Response Organization



Response mechanism after a spill is detected



Notification Chart:



Nat. Contingency Plan- Bangladesh (Draft)

- To prepare the nat. plan stressed had been given to country-specific:
- **(a) resources at risk** (sensitive area, ecologically critical area, PA area, fishing ground in the BoB, coastal resources, sea beaches, mangrove forest and its biodiversity, including tigers, turtle, dolphins etc).
- **(b) sources & causes of spills**,
- **(c) ambient conditions** (local conditions include current, velocity, tide & other meteorological factors),
- **(d) legal frame work including lead agency, its role and responsibility, operation centre, support agencies and companies etc.**

Nat. Contingency Plan- Bangladesh (Draft)

- **(e)** other **relevant factors** like, **routes, ways of shipments, loading & unloading, safety precautions, rules & regulations** (e.g. BCG, CPA,BSC,BIWTA, DoE, DoF, BN, SBA, Oil companies, BPC, private & public ones) **of oil tankers movement of regional, national, concerned port authority, river and coastal authority, shipment of oil for diff. purposes,**
- **(f) International agreement by Bangladesh government** (SACEP, Mar. Poll. Convention, UNCLOS, CLC,1990 etc) **should considered when adopting the plan.**
- **(g) draft plan** should **always an update/modifications having practical experiences on spill/chemical pollution response capabilities through training /capacity development both by nat. competent authority as well as by different regional and other bodies from actual incidents, drills,simulation exercises & other logistic capability**.

Conclusion:

- SACEP tried for long time to speed up the Regional capacity development on NOSCOP initiatives, **fact is the country specific response (eg.BD) does not go with the same speed as it should be**.
- **Identified obstacles/gap need to be solved to expedite the whole process for a successful implementation of NOSCOP plan-both regionally and nationally.**
- Need **supports and cooperation** of SACEP /IMO & others donor agency (e.g. NORAD or others), including SAS country, who have good experiences.

CONCLUSION:

- So, possible means for **proper implement of NOSCOP -BD plan** might be, instead of **part time responsibility** /assignment (responsible authority), there need **full time assignment (short and long term)** and others logistic support(form of a project/others).

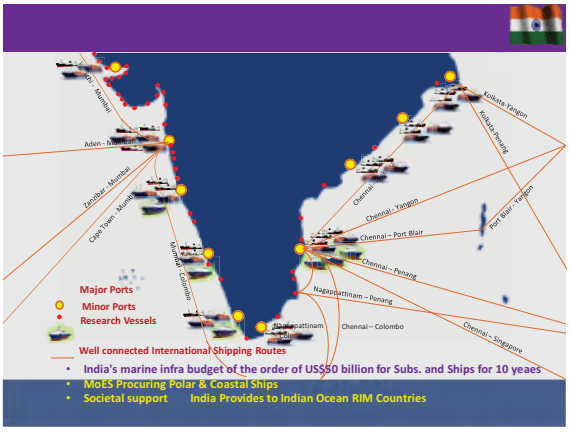
- When the competent national authority, contact points, response centre, NOSC and others as in NOSCOP–BD plan will be formed, then many of **MoU signed & agreed** between **SACEP (regional plan) and National party (Bangladesh) will be implemented.**

Thank you All

INDIA

SAS

REGIONAL SEAS



National meeting on
Enhancing Regional Cooperation Mechanisms on Marine Pollution
Preparedness and Response in SACEP region, India,
held at NIOT Chennai
2- 3 February 2015

The call for the meeting by the national consultant was received by the participating institutions, considering the importance of the cooperative mechanism on marine pollution preparedness and response.

About 46 participants from 32 Organizations including

- Ministry of Earth Sciences
- Ministry of Environment & Forests & Climate Change
- Director General of Hydrocarbons
- Dept. of Science & Technology
- Council of Scientific & Industrial Research
- Pollution Control Boards
- Ports,
- Oil Companies,
- Private companies

THE OCEAN

LIST OF INSTITUTES PARTICIPATED

No.	Institutes	No.	Institutes
1.	Ministry of Earth Science, MoES, New Delhi	9.	National Centre for Sustainable Coastal Management NCSCM, Chennai
2.	Integrated Coastal Marine Area Management (ICMAM) PD Chennai	10.	National Institute of Oceanography Goa
3.	National Institute of Ocean Technology, Chennai	11.	Gujarat Pollution Control Board Gujarat
4.	Ministry of Environment & Forests & Climate Change, New Delhi	12.	Tamil Nadu Maritime Board, Chennai
5.	Indian Coast Guard - New Delhi & Mumbai	13.	Maharashtra Maritime Board
6.	Department of Science & Technology, Pondicherry	14.	Cochin Port Trust Kochi
7.	Director General of Hydrocarbons, New Delhi	15.	Mumbai Port Trust Mumbai
8.	Mercantile Marine Department, Director General of Shipping, Chennai	16.	Adani Ports & SEZ Ltd., Gujarat

LIST OF INSTITUTES PARTICIPATED

No.	Institutes	No.	Institutes
17.	JSW Jaigarh Port Ltd., Maharashtra	25.	Hindustan Petroleum Corporation Ltd Chennai
18.	Visakhapatnam Port Trust	26.	Reliance Industries Ltd, Jamnagar
19.	Chennai Port Trust Chennai	27.	Cairn India Limited Mumbai
20.	New Mangalore Port Trust, Mangalore	28.	PPN Power Generating Co. Pvt Tamilnadu
21.	Ennore Tank Terminals Private Limited Ennore Chennai	29.	Mangalore Refinery & Petrochemicals Ltd Mangalore
22.	Krishnapatnam Port Co.Ltd.;Krishnapatinam AP	30.	Elektronik Lab Chennai
23.	L&T Shipbuilding Limited, Chennai	31.	Spilcare Environmental Technologies Pvt Ltd Chennai
24.	ONGC New Delhi & Mumbai	32.	Chemplast Sanmar Ltd., Karaikal

National meeting on Enhancing Regional Cooperation Mechanisms on Marine Pollution Preparedness and Response in SACEP region

INDIA

Venue: Rajendra Chola Hall, NIOT, Chennai

SCHEDULE OF ACTIVITIES

2nd February 2015

10.30 hrs Meeting with Dr R Venkatesan

1045 hrs Meeting with Dr. R. S. Kankara ICMAM-PD

11.00 hrs Review of documents available for "Enhancing Regional Cooperation Mechanisms on Marine Pollution (oil spill) Preparedness and Response in SACEP region"

11.30 hrs Discussion with Mr.George James Franklin, International Consultant on points to be discussed

13.00 hrs Lunch

14.00 hrs Visit to facilities tentatively scheduled to meet Indian Coast Guard officials to discuss on Regional contingency plan
Preparatory work for the meeting

National meeting on Enhancing Regional Cooperation Mechanisms on Marine Pollution Preparedness and Response in SACEP region

INDIA

Venue: Rajendra Chola Hall, NIOT, Chennai

SCHEDULE OF ACTIVITIES

3rd February 2015

09.50 hrs Registration of Participants

10.00 hrs Welcome address by Dr.M.A.Atmanand, Project Director ICMAM-PD & Director NIOT

10.10 hrs Introduction of attendees

10.20 hrs Role of Ministry of Earth Sciences by Dr. R. S. Kankara, Head - Coastal Processes & Shoreline Management

10.30 hrs SACEP Project overviews and expected outcome – Mr.Pulakesh Mondal, Senior Programme Officer, SACEP

10.50 hrs Photo Session

11.05 hrs SACEP Project update, objectives and review of the progress on decisions taken during meeting of the national authorities in Colombo, 26 – 28 February 2014 by Mr. George James Franklin, International Consultant

National meeting on Enhancing Regional Cooperation Mechanisms on Marine Pollution Preparedness and Response in SACEP region

INDIA

Venue: Rajendra Chola Hall, NIOT, Chennai

SCHEDULE OF ACTIVITIES

12.10 hrs Present status and overview of "Regional Oil / Chemical Spill Contingency Plan"followed by discussion to harmonize the National and draft Regional Plans by Mr.George James Franklin, International Consultant / Mr.Pulakesh Mondal, Senior Programme Officer, SACEP

12.45 hrs Lunch

13.45 hrs Technical and regulatory developments in HNS spill response by Mr.George James Franklin, International Consultant

14.30 hrs National / Regional Plan integration opportunities for improvement - Group discussion among all participants

15.00 hrs Areas that need updating / improvement in draft Regional Contingency Plan by DIG A.A Hebbar, Director (Fisheries & Environment), Coast Guard Headquarters, Delhi and Dr. R. Venkatesan, National Consultant Regional Exercise – Objectives, time-frame and expected country support / input / participation

15.30 hrs Development of action plan and time frame for implementation of steps identified for improvement – All participants

16.00 hrs Vote of thanks

Photos from the meeting

INTERNATIONAL CONSULTANT

- Mr. Franklin - presentation on the SACEP Project update and his experience in this region.
- Emphasized the objectives and review of the progress on the review undertaken.
- About the review of the regional oil spill contingency plan.

SACEP

- Mr. Pulakesh Mondal, SACEP briefed the audience about the SACEP activity and outcome.
- He also informed about the successful coordination among the South Asian countries.

Integrated Coastal Marine Area Management (ICMAM) PD Chennai

- Developed an oil spill trajectory modeling system and sensitivity mapping for oil spill impact assessment to provide support to Indian Coast Guard during any Oil Spill in India.
- Results and data sets are available through Indian National Centre for Ocean Information Services (INCOIS), for the users.

Indian Coast Guard

- DIG AA Hebbar TM, Director of Fisheries & Environment, Indian Coast Guard elucidated on the systematic efforts undertaken by Indian Coast Guard on updating & preparedness on National Oil Spill Disaster Contingency Plan (NOSDCP).
- Detailed presentation with overall view and the systematic efforts and system in place.
- Indian Coast Guard's regular oil spill response training assistance to neighbouring countries and their participation in National level pollution response exercises and bilateral/ multilateral exercises conducted by the Indian Coast Guard in India and in these countries.

- NOS-DCP prepared by Indian Coast Guard is well documented incorporating all the essential features and complemented the efforts taken by Indian Coast Guard.
- This regional initiative will enable to share the expertise and facility available in the South Asian countries;
- National Disaster Management Authority is adequately prepared to face consequences of natural and man-made disasters and has established presence in different parts of India for immediate response in case of any emergency
- India has systematic Central / State / District level coordinating agencies and also conducts mock drills for oil spill response.

- The oil companies have got their own preparedness.
- It is emphasized to maximize the capacities by combining the resources available in each country.
- Oil spill / marine pollution does not have boundaries and should share the information / data within the neighboring countries. For this, this project will be of immense useful.

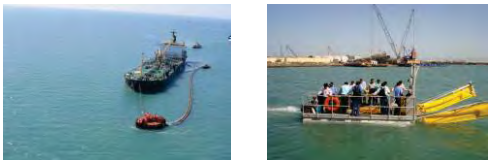
OIL SPILL RESPONSE TRAINING

IMO Level-1 training

PLACE	COURSE	STRENGTH
VADINAR	Biannual	20-25
CHENNAI	Biannual	20
PORT BLAIR	Biannual	10
MUMBAI	Biannual	20-25

IMO Level-2 training

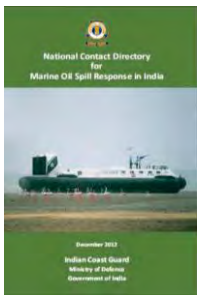
- By AMET University with ICG faculty support
- Biannual – February/ August
- 25 participants per course



OIL SPILL RESPONSE DRILLS & EXERCISES

NATPOLREX

National plan inventory & Contact directory



25

NOSDCP Circulars

BLUE WATERS

Participation at IMO

- MEPC
- OPRC-HNS
- IOPC FUND

28

The following points emerged:

- Sharing of expertise and resources among SAS countries
- Preparation of Risk mapping of sites along Indian Coast
- Scientifically stated SOPs to be prepared with the models of risk analysis
- SWOT diagram could be evolved involving different activities

- India has established facility for finger printing of oil spills by NIO Goa and could be made useful for other countries
- Expertise on preparation of Oil pollution trajectory maps is available and could be utilized.
- Regional plan largely deals with Oil pollution. It was responded that many management aspects are common for both oil and chemical pollution.

Regional Exercise and workshop
2 – 6 November 2015

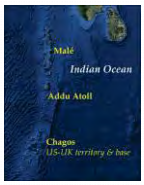
Oil Spill

The Maldives Perspective

Country profile

- A water-based country consisting of atolls ringed by islands scattered across the Indian Ocean with India and Sri Lanka to the north and East of the country.

- 26 atolls
- 1,190 islands
- 200 islands are inhabited.
- Over 100 tourist resorts in operation with many under construction across the country
- Out of the total 90,000 sq. km, the land area is of roughly 300 sq. km.
- Local population currently stands at around 3,000.
- Over 1 million tourists a year



The Islands

- Most islands are very small, some as small as few hundred meters.
- The 200 inhabited islands are divided in to groups with an administrative capital.

- The number of smaller inhabited islands in the atoll group may range from 4 to 16.
- Most public services in the Atolls are available in the respective administrative capital.
- 2/3rd of the country's population lives in the capital
- Any spill that spreads across the Indian Ocean either from the West or East will have disastrous consequences on the Maldives as a whole.
- Two major economies, tourism and fishing, are marine based activities and will have a dramatic impact on both.

Male' – the capital city

- The epicenter of all activities
- Main public services concentrated in the capital
- Almost all commerce to and from the islands centered in the capital moved across the country exclusively by sea

Male' – the bustling island city capital

Impact on the Maldives

- Unlike many other countries and in fact those in the South Asia Region, the Maldives has it's unique distinct features which make it very vulnerable to an oil spill that spreads across the Indian Ocean.
- Throughout the year the Ocean currents in the Bay of Bengal the Arabian Sea and the North Indian Ocean flow in a direction such that any spill around the wider northern Indian Ocean may have its effect on the Maldives
- The communities are dispersed living in islands in the Maldives means that any spill reaching the country will affect every individual community unlike land massed countries where much of populations are concentrated away from coast lines; affect on the Maldives is relatively very high.
- Therefore any spill that spreads across the Indian Ocean may have disastrous consequences on the Maldives as a whole.

Impact on the Maldives….

- Two main economies, tourism and fishing, are marine based activities and will have a direct and dramatic impact on both, including;
  - Fresh water as large proportion potable water is desalinated;
- The country with wide spread navigational marine hazards lying across major shipping routes is another vulnerability since that increases the possibility of a mishap from a freighter or a liner inside the country – rather than outside of it - the possibility of a spill right at the door step of an island community.

UNLIKE OTHER COUNTRIES, AN OIL SPILL IN MALDIVES IS A THREAT TO PHYSICAL SURVIVAL OF THE COUNTRY AND HER PEOPLE!!

SACEP 1st National Meeting

- Meeting was held on 08th and 09th of June under the banner "Enhancing Regional Cooperation Mechanisms on Marine Pollution Preparedness in the Sacep Region"
- The purpose of the workshop was to obtain a comprehensive understanding of the current status related to marine oil pollution through discussion among stakeholders
- Stakeholder ministries and private organization took part in the workshop notably:
  - The Transport Authority
  - Ministry of Environment and Energy
  - Maldives Coast Guard
  - Marine Police of the Maldives Police Service

SACEP 1st National Meeting ……

- Main concerns raised during the workshop re: The Maldives role in the implementation process of a regional plan:
  - that the Maldives did not have an all inclusive, all embracing national oil spill contingency plan;
  - participants were of the opinion that there was no clear direction as to which government organization is exclusively responsible for taking charge in the preparation and implementing the national oil spill contingency plan;
  - noting that the Maldives National Defense Force has a clear mandate to address and assist national disaster situations such as oil spills;
  - that the MNDF in fact has a working Oil Spill Contingency Plan.
- Both above issues are now being addressed, notably:
  - the Maldives is currently working on a tri-lateral security agreement with India – Sri Lanka – Maldives, aimed at strengthening the current Contingency Plan, and;
  - working with other friendly nations to further enhance the current OSCP in order to:

SACEP 1st National Meeting ……

  - establish sensitivity mapping of Maldives – national bio diversity index and national socio economic index;
  - Establish national dispersant policy and national geographic information system;
  - Addressing the immediate equipment requirement;
- the irregularity in the regulatory mechanism vesting responsibility for disasters has now been resolved with the passing of the National Disaster Management Act under which comes the National Disaster Management Authority headed by the president;
- Act 28/2015 sets out clear and unequivocal mandate to NDMA.
- Still it is understood that some key features such cost bearing and claims settlement mechanisms are not addressed in the current OSCP.
- List of available equipment is again another important element of the plan not included since very limited resources are available in the country.

With those issues currently being addressed, it is hoped that the Maldives is currently on the right path in addressing this important issue of oil spill contingency planning, and once the National Plan is finalized, it can then be integrated in to the regional contingency plan through SACEP

Obviously we don't want to deprive these children of their beaches nor;

these fisherman of their livelihood which depends entirely on fishing…..

Thank you

SCHEME OF PRESENTATION

- National Marine Disaster Contingency Plan (NMDCP) - Background
- National Contingency Plan (Pollution)
  - Introduction & Objectives
  - Tiered approach & Response mechanism
  - Sustainability of the plan
- National Workshop Action Items
- Gaps in National / Regional Plans
- Way Forward

3

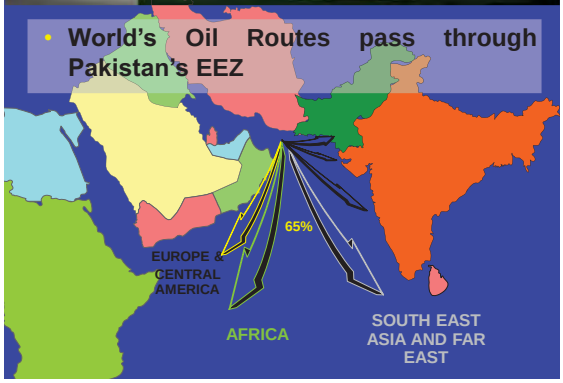
BACKGROUND

- Pakistan imports large quantity of oil & chemicals to meet energy & industrial requirement

9

BACKGROUND

- World's Oil Routes pass through Pakistan's EEZ

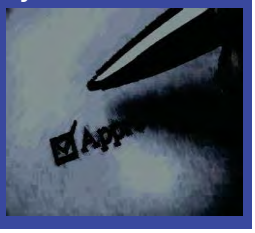


BACKGROUND

- Grave risk of oil/chemical pollution always present
- Affects humans, marine life & environment
- Incident of MV Tasman Spirit - 2003

BACKGROUND

- National Maritime Disaster Management Plan (NMDCP) prepared after considering various systems
- Approved in 2008



8

INTRODUCTION

- Provides coordinated mechanism to deal with marine disasters
- Provides national system for prompt response and relief operations with Pakistan Navy in Lead Role
- Effective throughout Maritime Zones of Pakistan

9

INTRODUCTION

Plan caters:

- Pollution from oil, chemicals and Hazardous Noxious Substances
- Search & Rescue
- Salvage in harbour & at sea

10

NATIONAL LEGAL FRAMEWORK FOR MARINE POLLUTION

- Party to UNCLOS and OPRC-90
- Constitution of Pakistan (Articles 9 & 14)
- Pakistan Environment Protection Act 1997
- Pakistan Merchant Shipping Ordnance 2001
- Port Authorities Acts
- Pakistan Territorial Water and Maritime Zones Act 1976
- Pakistan Panel Code

11

ORGANISATION

12

ORGANISATION

- Pakistan Maritime Disaster Management Board (PMDMB) NATIONAL LEVEL
- Maritime Disaster Response Committee (MDRC) OPERATIONAL LEVEL
- On Scene Commanders (OSC) TACTICAL LEVEL

13

POWERS & FUNCTIONS - PMDMB

- Defines resources required to be maintained by stakeholders
- Periodic review of the Operational Plans
- Designation of monitoring team for inspection of equipment and evaluation of readiness of the stakeholders
- Nomination of On Scene Commander (OSC)
- Activate NMDCP and alert neighbouring countries of marine pollution threats as appropriate

14

DUTIES - MDRC

- To assemble on activation of any part of Plan
- Provide necessary support to OSC required from concerned organisations /ministries
- Monitor progress & coordinate assistance from stakeholders
- Update & advise PMDMB on disaster situation
- Remain available to OSC to support ongoing operations
- Review plan at the end of each disaster & biennially

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ON SCENE COMMANDER

- OSC for Contingency Plan
- Exercise over all command for containment, cleanup, relief, rescue and recovery operations at Scene of Incident
- Ensure health and safety of men and material during operations
- Empowered to delegate all / part of his duties

16

DISASTER RESPONSE CENTER

- HQ PMSA Operations Room acts as Disaster Response Centre (DRC)
- 24/7 manning
- Evaluates and advises Chairman PMDMB
- Upon activation of NCP, station for MDRC

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CONTINGENCY PLANS - NMDCP

- National Contingency Plan (NCP) - Pollution
- National Contingency Plan (NCP) - SAR
- National Contingency Plan (NCP) - Salvage

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CONTENTS OF CONTINGENCY PLAN

- Scope
- Objectives
- Procedure for reporting and initial assessment
- Activation procedural plan
- Response phases/procedures
- Disaster management priorities

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CONTENTS OF CONTINGENCY PLAN

- Out sourcing procedures and options
- Resource agencies
- Restoration and monitoring
- Instructions on Coordination & Communication

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OBJECTIVES

- Ensure timely response to deal with oil / chemical spills
- Develop efficient detection and reporting mechanism
- Ensure correct assessment of the incident
- Encourage cooperation amongst stakeholders
- Ensure correct response and techniques

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OBJECTIVES

- Strengthen capacity of stakeholders
- Facilitate information / resource sharing, joint exercises and training
- Mitigate damages and restore environment as far as possible
- Evolve procedure for multinational cooperation

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RESOURSE AGENCIES

- Pakistan Navy
- PMSA
- Pakistan Army
- Ministry of Ports & Shipping
- Ministry of Climate Change
- Ministry of Petroleum & Natural Resources
- Ministry of Interior

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RESOURSE AGENCIES

- National Institute of Oceanography (MoST)
- Provincial Governments / Local Bodies of Sindh & Baluchistan
- Oil Marketing Companies
- Karachi Shipyard & Engineering Works
- Private Oil Terminal Operators
- Pakistan Meteorology Department (Aviation Div)

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NCP - POLLUTION

•NMDCP is based on Tiered Response Concept:

- Tier-1 Spills of less than 7 tonnes
- Tier-2 Spills of 7-700 tonnes
- Tier-3 Spills of greater than 700 T

26

RESPONSE MECHANISM

➢ TIER – 1

- Respective stakeholder of the AOR will act as Lead agency
- Resources required for Tier-1 spill is the responsibility of the individual lead agency
- Chairman PMDMB may task OSC if deemed necessary regardless of the quantity of spill

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RESPONSE MECHANISM

TIER – 2

- Coordinator MDRC (PMSA) will act as Lead agency
- Resources required for Tier-2 spill will be pooled up at the disposal of Coordinator
- PMDMB may determine & decide to escalate the response to Tier-3

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RESPONSE MECHANISM

• TIER – 3

- MDRC will control the response in coordination with regional and international systems like East Asia Response Ltd (EARL) & Singapore & Oil Spill Response Ltd (OSRL) UK
- Oil companies required to have contractual agreements with such organizations
- Administrative arrangements for foreign assistance by Min of Ports & Shipping according to requirements of PMDMB

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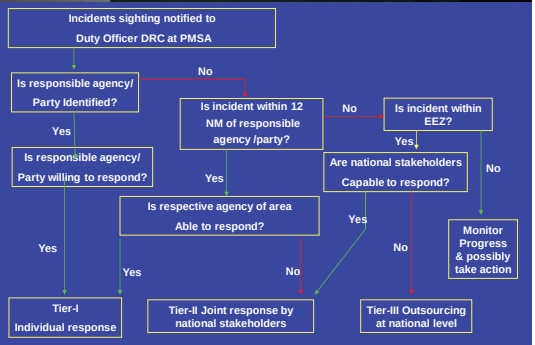
RESPONSE MECHANISM



30

ACTIVATION OF CONTINGENCY PLAN

- Authority rests with Chairman PMDMB
- Contingency Plan is activated:
  - On request of the stakeholder unable to control Tier-1 spill
  - On request from neighbouring state

31

PROTECTION PRIORITIES

- Health & safety of population
- Habitat & cultural resources
- Flora & fauna
- Vital industries
- Beaches/ recreational spots

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MARINE INQUIRY/ INVESTIGATION

- DG Ports & Shipping has legislative power to initiate legal proceedings and actions
- Inspectors/ surveyors from KPT, PQA, GPA and PMSA to investigate / collect evidence from respective AOR
- Investigation team will be authorized to board, inspect and collect samples recommending prosecution, if required

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CAPACITY BUILDING OF STAKEHOLDERS

- Minimum equipment to be maintained by stakeholders identified in NCP
- PMDMB provides necessary resources and equipment to MDRC for combating Tier-2 spills
- Regular exercises conducted by each stakeholder at individual level and details forwarded to DRC and Chairman PMDMB

34

CAPACITY BUILDING OF STAKEHOLDERS

- Joint exercises are organized biennually under Coordination MDRC
  - Exercise BARACUDA I-VI and Exercise Sea Horse
  - Shortcomings in terms of men and material are forwarded to Chairman PMDMB

35

SUSTAINABILITY/ GROWTH OF NCP

- NCP is reviewed biennially by MDRC:
  - Experiences gained through exercises and incidents are incorporated
  - Alerting lists and equipment inventories updated
  - Any organizational or legislative changes are catered

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FEEDBACK/ READINESS

- Quarterly reports to Coordinator MDRC about statistics of oils/chemicals spills with in AOR by all stakeholders
- Approved organizational contingency plan forwarded to Coordinator every year and amendments within 15 days
- Risk assessment survey report to Coordinator MDRC every year by stakeholders
    - Risk assessment are carried out by Recognized Organization

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NATIONAL WORKSHOP

ON

ENHANCING REGIONAL COOPERATION

(12-13 JANUARY 15)

38

ACTION ITEMS

- Revision of NMDCP
- In situ burning procedures & its effects be updated in plan
- Revise national oil spill contingency plan wrt chemical pollution/spill
- Format of regional/ national plans of all regional countries be on same format & fully synchronized

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ACTION ITEMS

- Undertake discussions by relevant stakeholders for takings steps to sign /join the fund conventional
- Requirement of domestic legislation be considered
- Requirement of trans-boundary spill /pollution cooperation mechanism for neighbouring countries outside SACEP/ SAS region be studied by Pakistan

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ACTION ITEMS

- Fresh risk assessment & mapping be undertaken along with analysis for realistic mobilization
- Requirement of IMO level 1, 2 & 3 training for oil spill (through ITCP) be studied
- Regional plan be revisited in light of respective national preparatory meetings with consensus

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ACTION ITEMS

- Chemical spill be made part of regional plan
- Regional exercises & discussion be held to evolve better cooperative mechanism

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GAPS - NCP

- Revision of NMDCP
- Inclusion of new stakeholder i.e M/S BYCO in the plan
- Inclusion of In-situ burning procedures, effects, benefits/ disadvantages & other SOPs in the plan
- Meetings be held with all stake holders on adopting control measures to limit On-shore marine pollution

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GAPS - NCP

- Risk assessment of all critical zones to ensure effective measures to avoid oil spill incidents
- Tier-3 preparedness & Response actions as per NMDCP with EARL (Singapore) & OSRP (UK)
- Updation of respective national coordinators wrt status of oil spill control equipment & expertise available by all stakeholders

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GAPS - RCP

- Update SACEP secretariat annually by National Coordinators
- SACEP secretariat must maintain an up to date regional database
- SACEP secretariat must have one representative/ member from each member country for liaison & coordination
- Neighbouring countries like Iran & Oman be also taken onboard & be invited as observers during regional exercises

45

GAPS - RCP

- Communication link may be enhanced within SACEP regional countries to meet requirement of regional plan
- Pool of resources of SACEP be based on a rationalised formula e.g oil exploration/import volume of each SACEP country
- Recommended insurers for Tier-3 response be identified for engagement by SACEP countries

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GAPS - RCP

- Legislation or Mechanism be carried out by each SACEP country for
  - Pre-approvals for swift trans-boundary mobilization of oil spill response teams in case of any oil spill incident within SACEP countries
  - Issues related to use of dispersants & use of air space over flights without any bureaucratic hurdles be addressed

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GAPS - RCP

- ITOPF & other international conventions related to oil, ports & cargo regimes be ratified by all member countries
- Response time for resource mobilisation be worked out for each member country & planned accordingly
- Standards for carrier of Hazardous Noxious Substances (HNS) may be promulgated by SACEP for member countries

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GAPS - RCP

- Table top exercises/simulation drills followed by practical exercises be planned /organised by SACEP Secretariat on regular basis
- Capacity building specialized training for the response teams of SACEP regional countries be organised on regular basis
- Oil Spill control equipment be standardized with in SACEP countries for joint response & training

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WAY FORWARD

- Conduct of regional practical exercises to ascertain spill preparedness & response
- Requirement of latest technological advancement in incident preparedness & response
- Simulator/ CBTs based exercises be conducted by all regional stakeholders & ascertain communication gaps

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WAY FORWARD

- Harmonize the national/ regional plans
- Capacity building both in terms of men & material for all stakeholders

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THANK YOU

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IMO and NORAD in partnership with
the South Asia Co-operative Environment Programme
(SACEP)

Regional Exercise and Workshop for Oil Spill Preparedness in South Asian Seas Region
2-6 November, 2015
Galadari Hotel, Colombo, Sri Lanka

National Oil Spill Contingency Plan of Sri Lanka and Update requirement

A.J M. Gunasekara
Manger Operations

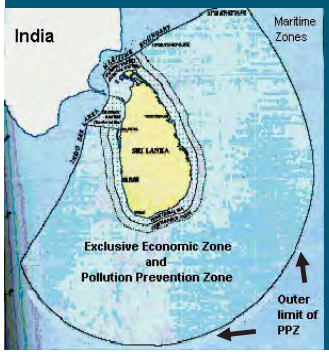
National Oil Spill Contingency Plan (NOSCOP)

Significance of a NOSCP to Sri Lanka

- **National Commitment**
- **Associated Risks**
  - **Ports in Operation**
  - **Ship route**
  - **Ship services**
  - **Sensitive Areas**
  - **Economic Activities**

National Commitment...

Maritime Zones of Sri Lanka



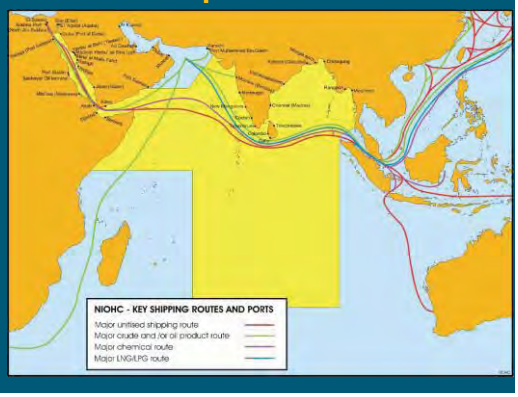
Maritime Zone	from Baseline (Nm)	Area (Sq.Km)
Territorial Sea	12	21700
Contiguous Zone	24	22600
EEZ/PPZ	200	465800

Risks associated.....

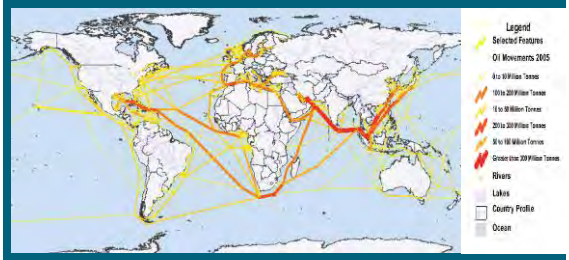
Marine Based

- Tanker Transportation of oil over 525 Mn MT /y within SL EEZ
- Dense marine traffic volume on main East/West shipping route
- Offshore Single Point Buoy Mooring [SPBM] off Colombo Port
- Bunker & ship repair industry
- Trincomalee oil tank farm
- Ports expansion activities
- Proposed Petroleum refinery down south with a SPBM
- Oil Explorations
- Poor tech. worthiness of vessels in traffic

International Ship Routes



Amount Oil Passing through Sri Lankan Water



Commercial Ports

Oil Exploration

Sensitive Areas

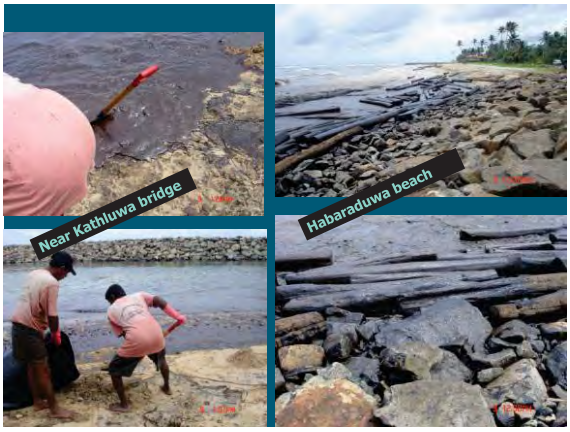
- Ecosystems
  - Mangroves
  - Shallow coral reefs
  - Sea grasses
  - Muddy tidal flats
  - Sandy beaches
  - Rocky shores
  - Lagoons and estuaries
- Socio-Economic Activities
  - Fishery Industry
  - Tourism Related
  - Water Intake

Tourism contributes 8% GDP (Rs. 6.5 Billion)

The Fishing Industry contributes 1.2 % to the GDP


Oil and chemical Spill Incidents
M.V.AMANAT SHAH
MT. GRANBA
GRANBA
ISTANBUL IMO 8030269
M. V. Thermopylae Sierra


Impact of oil Spill
Koggala Lagoon


Near Kathluwa bridge
Habaraduwa beach


Day six Photos 14/9/2006
Koggala Lagoon


Stilt Fishing
Koggala Beach


Controlling Oil spread
Using local materials Boom

Marine Pollution Prevention Act

No. 35 of 2008

Mandate

For prevention, reduction and control of pollution in Sri Lankan waters

Function of the Authority - Section 6(g)

To formulate and implement the

NATIONAL OIL POLLUTION CONTINGENCY PLAN

National Oil Spill Contingency Plan (NOSCOP)

- Prepared in 1995 & revised in 98,99
- Passed by Cabinet - 2000
- INSTCOM – Revision
- National Workshop - 2003
- Re-submission to CoM by MENR
- CoM Approval Granted Dec 2004

Revised again in 2008, and 2012

National Oil Spill Contingency Plan

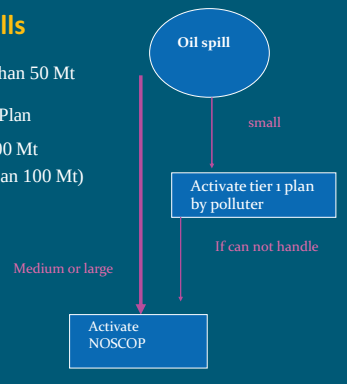
- ❖ It outlines the arrangements for responding to oil spills in the marine environment
- ❖ With the aim of protecting it from oil pollution

or

- ❖ Where this is not possible to minimize such effects

Levels of Oil Spills

- Tier I - Small spill- less than 50 Mt
  - Own Contingency Plan
- Tier II - Medium (50-100 Mt
- Tier III – Large (more than 100 Mt)



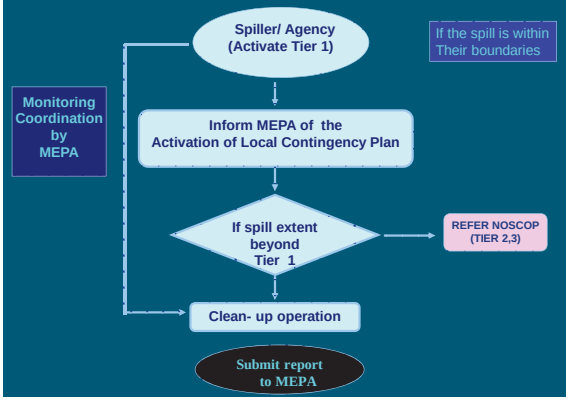
Marine Pollution Prevention Act No:35 of 2008

Section 39 (1),

The Authority shall have the power to direct, all persons in charge of
- Ports,
- Harbour terminals,
- Repair yards of ships,
- Dry docks,
- Off shore installations,
- Pipe lines or
- any other apparatus used for transferring oil to or from a ship

To submit an Oil spill Contingency Plan

when an oil spill is reported to any of the notifying authorities. Information receiving agencies should immediately notify MEPA .



Response Strategies

- Mechanical methods
  - -Containment and recovery- booms ,skimmers
  - -Shoreline protection
  - -Shoreline cleanup
- Chemical methods
  - - Oil Spill Dispersant – after NEBA

Responsibilities assigned in NOSCOP

Ministry of Environment
Secretary, Ministry of environment in coordination with DMC is responsible for direct all ministries to carry out their responsibilities in an oil spill emergency situation as laid down in this plan.

Secretaries of the following Ministries are responsible to direct all agencies preview under the ministry to assist MEPA to implement NOSCOP.

- Defence
- Finance
- Port and Aviation
- Foreign affairs
- Public Administration
- Health
- Fisheries and Aquatic resources
- Science and Technology

Key Agencies

MEPA- Lead agency
DMC
Sri Lanka Navy
Sri Lanka Coast guard
Sri Lanka Airforce
Sri Lanka Army
Sri Lanka Police
CPC
CPSTL
Private agencies, Dockyard, Oil Companies, Bunkering companies
NARA
Meteorology
Fisheries

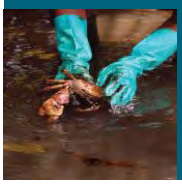
Response Policy / Strategy

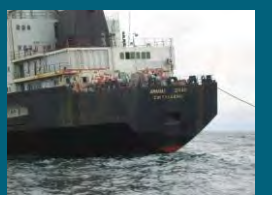
response strategies

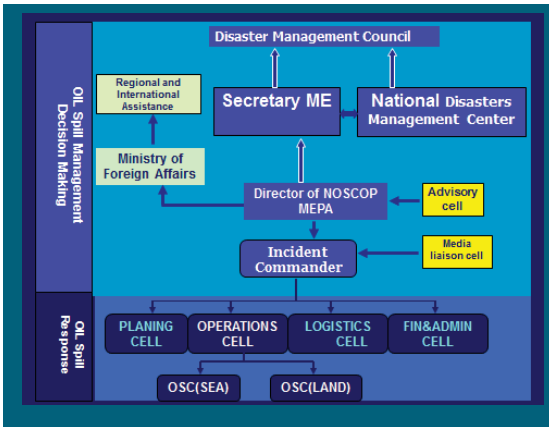
- Monitoring and evaluate
- Dispersants- secondary response
- Containment and recovery
- In situ burning-not available equipment required
- Shoreline protection / clean-up

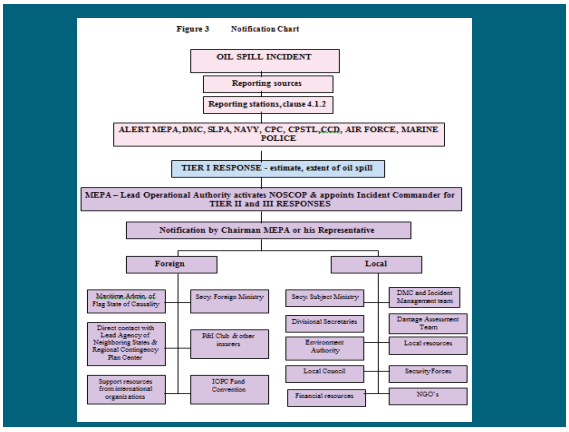
Response Phases

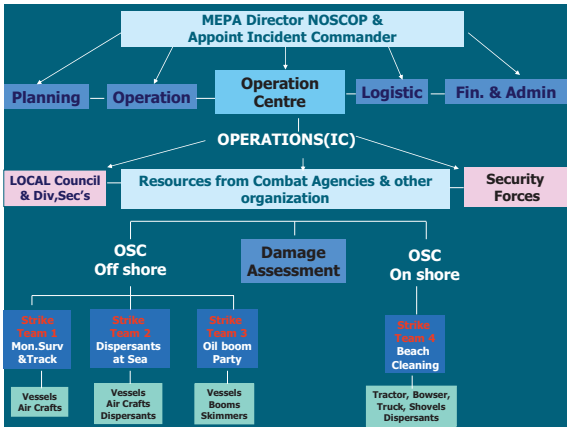
- Notification
- Evaluation and activation of plan
- Joint response operation at sea
- Joint response operation on shore
- Demobilization





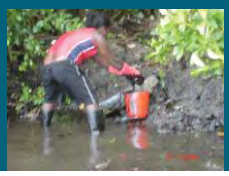






Termination of National operations and deactivation of the plan

- Pollution measures have been completed
- No further threat of pollution is confirmed
- The response has reached a point where the local organizations can complete it



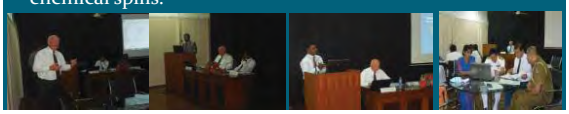
NOSCOP Annexes

- 1. Directory of MEPA and other officials Contact point
- 2. Locally Available Equipment, Materials, and personnel
- 3. Decryption of crude oil and refined products
- 4. Offshore operations
- 5. Onshore operations
- 6. Guideline for disposal of oily waste and debris
- 7. Communication system
- 8. Guideline for reporting oil spill (Areal monitoring)
- 9. Emergency/ situation report forms
- 10.Stanadard format for requesting assistance
- 11. Resources available in other countries
- 12. Guideline for filling claims

National Preparatory Meeting on Enhancing Marine Pollution Preparedness and Response in Sri Lanka

focused on following objectives:-

- To review the NOSCOP of Sri Lanka together with the South Asian Regional Oil and Chemical Spill Contingency Plan and the synchronization of the national contingency plan with the regional contingency plan
- To evaluate capacity building needs to enhance oil and chemical spill combat capability
- To analyze liability and compensation issues related to oil and chemical spills.



Outcome /Recommendations adopted

- The oil pollution risk of the countries in the South Asian region has significantly increased in recent years.
- The oil spill response capabilities in the region have not been adequately strengthened to manage this risk.
- Individual countries capability should therefore be developed to address this risk and the regional mechanics should be strengthened.

- Sri Lanka has formulated a National Oil Spill Contingency Plan and taken several measures to implement this plan. However, the oil spill response capabilities need to be developed further.
- The National Oil Contingency Plan addresses only oil spills. The National Oil Spill contingency plan should be updated to include chemical spills in line with South Asian Regional oil and Chemical Spill Contingency plan.
- .
- The detailed oil spill risk assessment has not been carried out since 2003. The oil pollution risk in Sri Lankan waters should be assessed in order to get a better understanding of the required level of preparedness.

- The NOSCOP has followed the ITOPF contingency plan format. However there are some deviations. The National Plan should be amended as per an agreed internationally used format. All regional countries should use the same format.
- The Sri Lankan plan adopted the Incident Management System (IMS) as the preferred oil spill management tool. As this system is widely used, it is recommended that the regional contingency plan should adopt IMS as its preferred organization model. It would also be beneficial if this system was adopted by the other countries in SACEP.
- Sri Lanka should again review the oil spill response strategies that can be used to respond an oil spill. All response tools, including in situ burning, should be considered and circumstances and locations determined when and where these strategies can be adopted and the limitation of such strategies should be incorporated to the plan.
- .

- The Sri Lankan plan has several annexes and all annexures are compatible with the Regional Contingency plan.. The Sri Lanka plan and regional plan use the same POLIREP
- The equipment available for Sri Lanka to use in combatting major oil spills is not sufficient, therefore the oil spill combat stockpile list available in other countries should be further developed.
- Sri Lanka is a party to CLC 1992 and The Fund 1992, however comprehensive national legislation is still not available. Sri Lanka, so far, has not ratified the Bunker Convention and measures should be taken to ratify convention early
- The OPRC convention and OPRC HNS protocol should also be signed. The necessary measures need also to be taken to implement both these conventions

- Sufficient funds should be allocated to strengthen of oil spill combat capabilities of the country. "polluter pays" principle should be considered with levies imposed on ships arriving in Sri Lankan ports. Other SACEP member countries considered to be used the same principle and they imposed levies on oil movements with this fund then used to develop oil spill combat capabilities.
- Sri Lanka has given priority to mechanical oil combat strategies and also allowed the use dispersant after carrying out a NEBA (Net Environmental Benefit Analysis). But further dispersant usage policy should be improved.
- Several stakeholder agencies are involved in the National Oil Spill Contingency Plan implementation. Agreement should be in place between MEPA and these related agencies to cover the responsibilities assigned in the plan.

- The communication plan should be clear and the channel for communication with different agencies should be added to plan.
- The likely type of oil that could be spilled together with the probable fate of this spilled oil should be identified and should be incorporated into the plan as an annex.
- Oil Spill dispersant usage policy and approval method should be defined and should be incorporated to the plan
- Oil Spill slick movement prediction system should be developed (Oil Spill Trajectory model) and details should be incorporated into the plan.
- Funding and fund release mechanics and authorities of different officers involved in IMT should be clearly defined.
- Place of refugees in Sri Lankan waters for ships should be identified and should be incorporated into the plan.
- Other agencies that can provide assistance in the event of oil spill. These agencies responsibilities should be incorporated into the Plan. e.g , Fire Begrade immigration and customs.

- The regional plan database should be incorporated into the SACEP website and should be frequently updated by each national authority. The data base should be password controlled with each national agency having the capability of updating the data base.
- An online data sharing and communication system should be established in South Asian Regional countries.
- The regional plan annexes should follow a common format methodology. E.g. The POLIREF.
- Regional Drills and Training programs should be conducted annually to share relevant knowledge among officers and strengthen the cooperation and team building among them.

Thank you
for
Your attention

Annex 4 - Exercise Scenario

Background

As part of the SACEP project to enhance regional co-operation in the event of a major oil spill, the desktop exercise is part of the agreed programme to test the present regional plan lines of communication and understanding of the “POLREP” system.

Objectives

- Test the member states representatives understanding of the Regional Plan and their responsibilities.
- Require each member state to participate in the scenario as the exercise develops and utilise the “POLREP” system
- Test the mechanisms for requests for assistance and allocation of regional and/or international resources
- Identify potential improvements for the Regional Plan update.

Exercise Details

The exercise will be held am/Wednesday 4th November 2015 at the Galadari Hotel in Colombo on the morning of Day 3 of the workshop.

Delegates from the 5 countries will be separated into their own individual groups.

Prior to the start of the exercise, all delegates will be walked through a worked example of the POLREP process (Introductory Part/POLWARN/POLINF/POLFAC).

Note:

1. National Contingency Plans to be used to determine procedures and responsibilities for interface into Regional Plan
2. Regional Plan sections 4/5/Appendices to be used as references.

Exercise Scenario

Tanker incident in the Indian Ocean off the SW Coast of Sri Lanka. The VLCC tanker Waterford Diamond, fully laden with 320,000 MT of Middle East heavy crude oil en route from the Arabian Gulf to South China Sea for orders was in collision with a container ship in the early hours of Wednesday 4th November 2015. Large release of oil has occurred, amount not yet known.

The vessel is Bahamas Flag, owned by The ABC Trust Company in Cayman Islands and operated by DEF Marine in Hong Kong. The Master is from the Philippines with a mixed Asian crew. (Burma, Indonesian, China)

Vessel is badly damaged above and below the waterline on the port side just forward of the aft accommodation and is on fire. 4 crew are reported missing.

Oil has also escaped from the No 5 port wing tank, estimated at +10,000m3.

Wind and current will be pushing the oil slick in a Northerly direction with the likelihood of impacting the west coast of Sri Lanka.

Format:

PART 1 **Introductory Part/POLWARN**

All countries will be given the scenario.

As the then designated Lead Agency, each country will discuss and then **complete the POLREP Introductory Part and the POLWARN**

Note: All countries to consider the contents of their own NOSCP together with the regional plan with respect to how they initiate the Regional Plan and how they could/would assist in the event of a need for a request for assistance.

Action : Review of each country's POLREP documentation

PART 2 **POLINF**

Inject – Further incident scenario details to all countries

Each country to **complete the POLREP POLINF DOCUMENT.**

Each country to assess the extent of the pollution and determine the type and level of response required and whether there is a need to activate the Regional Plan. (Section 4.1 Phase 2)

The NOSCP should be followed with respect to whether external assistance is required.

Action: Review each country's POLREP POLINF Documents

PART 3 **POLFAC**

Each country to complete the POLREP POLFAC DOCUMENT

Issues to be addressed include the request for assistance, where it is needed, how it will be delivered etc. etc. Cost, charging, insurance, liability, equipment mob/demob and all logistic issues to be considered and, if there is a possibility of trans boundary movement of the oil slick, the Change of Command.

Action: Review each country's POLFAC Document

PART 4 Debrief, conclusions and discussion on possible improvements to the Regional Plan.

Annex 5 - Agreed updates to the Regional Plan

SACEP Regional Plan update and review

Suggestions proposed following the exercise -

Bangladesh:

- No significant issues with current Regional Contingency Plan (RCP) as its purpose is a tool to facilitate the various National Contingency Plans (NCP) of the region.
- Suggests a more proactive role by SACEP.
- SACEP should host the RCP and NCP's on their website.
- IMO/ORSL/ITOPF should provide support for training and practical workshops.

India:

- Current RCP is too prescriptive in relation to Operational Procedures and more specifically in relation to section 3.5 - Command Structure.
- The RCP should incorporate references to guidelines and manuals and other useful resources and hotlinks.
- Should SACEP host the RCP on their website, they could also incorporate links to the various NCP's.
- Contact information needs to be updated proactively (perhaps via routine prompting by SACEP).
- In order for the RCP to become a live and useful document it should be possible to enact amendments immediately providing a consensus agreement by the member states has been reached in relation to the amendments.
- The RCP should remain as an operational document and kept at that level.
- Annex 10 should be removed.

Maldives:

- RCP may be more useful if re-formatted to have operational procedures at the beginning of the document, in addition to incorporating flow diagrams and checklists.
- SACEP should maintain and update the contact details in Annex I.
- Highlighted the importance of alignment of the NCP with the RCP.
- Highlighted the need to ensure there is no overlap between procedures outlined in RCP with those already existing and in operation.
- The POLREP should be sent to IMO and SACEP in addition to member states.

Pakistan:

- SACEP should coordinate updates and circulate the updated plan.
- Highlighted that the RCP is a good tool for further developing the NCP's.
- The RCP needs more detail within the background section, to make the concept and history of the document clear to those unfamiliar with it.

Sri Lanka:

- National procedures for facilitating regional cooperation require further development.
- NCP's need to be updated to fill any gaps with respect to implementing the RCP.
- The Annexes of the RCP need to be completed.
- SACEP should host the RCP online and coordinate the update of the contacts lists and other relevant information.
- Equipment deployment exercises would also be most useful.

Agreed amendments during review of the Regional Contingency Plan

General

- The plan is biased towards oil response and should be more neutral.
- Reference to 'Parties' should be replaced to read 'Member States'.
- Replace 'ships' with 'vessels'.

1 Introduction

- 1.1 Background – Remove references to dates or quantities that would require regular update.
- 1.1.6 include reference to risk to Bangladesh.
- 1.3 Clarify that the plan also refers to incidents outside the EEZ that threaten within the EEZ as per the Intervention Convention.
- 1.3.3 amend to highlight the cooperative framework already in place in the region.
- 1.4 Definitions section should be more comprehensive.

2 Policy and Responsibility

- 2.1.1 f) delete customs officers.
- 2.1.1 i) include any services resources that could assist in an incident response.
- 2.3. Arrangements for meetings of National Operation Authorities responsible for the implementation of the plan should be discussed at next SACEP meeting (Jan/Feb 2016). Propose that SACEP could assume the role of coordinating and providing secretarial services to these future meetings of the National Operational Authorities. Suggestions for the meeting included holding it in conjunction with the SACEP board meeting or as appropriate in order to ensure representatives of the National Operational Authorities could attend, the use of video conferencing should also be considered.
- 2.5 Revision and Amendment of the Plan.
- Amend to indicate that any changes agreed by the consensus of the National Operational Authorities should be sufficient to approve and enact, and should come into effect immediately upon consensus agreement. (Agreement for this may need to be sought at SACEP board level)

3 Response elements and planning

- 3.5.1. Indicate that the command structure to be used in regional/joint operations needs to be agreed and well understand by all member states.
- Move existing diagram with dotted lines to annex and suggest this structure in the plan is indicative / an example only.
- 3.5.2. b) should be called Operational / Advisory control

- 3.6.3. Refer to any suitable means of communication.
- 3.7.2. Remove paragraph beginning ‘Maps….
- 3.7.3. Replace to read ‘Guidelines if any….’ Replace reference to NCP to instead incorporate instruction by lead authority.

4 Response Operations

- 4.1.5. Replace the word ‘judgement’ to ‘consideration’.
- 4.1.4 and 4.1.5. Reference POLREP and its corresponding Annex, where applicable, as method of communication.
- 4.1.9. Replace paragraph to read ‘Joint response operations at sea shall be conducted in accordance with the procedures described in the NCP of the lead party using primarily national resources, which shall be supplemented, as necessary, by the other member states at the requests of the Lead Authority. Units of the assisting Parties shall work under direct Operational Control and Tactical Command of their respective NOSCs and unit commanders or team leaders. However, at the discretion of the assisting Party, Tactical Command may be directed by the lead authority where appropriate.’
- 4.1.10 Reference … in accordance to the priorities outlined in the NCP (remove vulnerable and environmental resources).
- 4.2.1. Remove ‘(ships, vessels)’.
- 4.2.3 Replace to read ‘Guidelines if any….’ Replace reference to NCP to instead incorporate instruction by lead authority.
- 4.4.1. Reference to guidelines and manuals outlined in Appendix? rather than specifying IMO guidelines.

5 Reporting

- 5.3.3 Transfer paragraph to section 4.6.

6 Administration, Logistics and Funding

- 6.1 Replace sub-title with Logistics, immigration and customs formalities (and combine sections.
- 6.1.2. Replace officer with a point of contact (POC).
- Replace ‘ships’ with ‘vessels.
- c) and d) should be sub paragraphs under b).
- re-order to enable inclusion of point – ‘a) should be responsible for receiving for receiving the aircraft and vessels’.
- merge all relevant duties under the responsibility of the POC and remove repetitive sections.
- 6.2.1. Remove the sentence beginning ‘A flight plan …’
- 6.2.2. b) at the end of the paragraph add ‘,as applicable under national law’.
- 6.2.3. Remove reference to Annex 2.
- 6.4. d) include ‘any other voyage (S&R, medi vac)’.
- 6.5 at end of introductory sentence, add ‘as appropriate’.
- 6.5.2 at the end of the paragraph add, ‘However privately listed resources will be governed by the prevailing rates at the time of the incident’.
- 6.5.6 Remove reference to Annex 9.

- 6.8.2 include ‘e) number of incidents / injuries’.

7 Public Information

- 7.1.2. Include ‘d) press reports provided to assisting countries’.

Annex 1

- Remove ‘Competent Customs Authorities.

Annex 2

- In tables remove ‘District Authorities and Local Authorities’.

Annex 3

- In the column titled ‘Cost’ replace with ‘Cost, where appropriate’.

Annex 4

- On page 67, highlight (to be completed at a later stage).

Annex 5

- Include reference to the most up to date guidelines available.

Annex 6

- Should be incorporated into Annex 8.

Annex 7

- To be updated by Consultant.

Annex 8

- Should also include a blank form that can be used in time of need.
- A blank POLREP form should also be made available on the SACEP website.

Annex 9

- A link should be provided to the current manual and annex should be updated.

Appendix 1

- Should be removed.

Annex 6 - Action Plan and Time Frame

Action Plan/Recommendations (6 November 2015)

1. SACEP Secretariat to prepare a submission to the next Governing Council meeting of SACEP expected to take place in January 2016. The submission should include an update on the progress of the NORAD-SACEP project in general, and more specifically should include:

- The updates agreed on the Regional Contingency Plan on Oil and Chemical Pollution during the Regional Exercise and Workshop, particularly those related to the procedures for future amendments to the Plan.
- The proposal for regular meetings of National Operational Autho
- rities responsible for the implementation of the Regional plan, to be held at regular intervals, and as a minimum once a year, as per the MoU for the Co-operation on the Response to Oil and Chemical Pollution and the Regional Contingency Plan.
- The proposal from member states for the SACEP Secretariat to undertake a more proactive role with respect to building spill preparedness and response capacity in this region. This enhanced role should include:
    - Hosting and maintaining the Regional Contingency Plan and National Contingency Plans on the SACEP Website
    - Coordinating the update of contact points for the implementation of Regional Contingency Plan i.e. Annex 1 of the Regional Contingency Plan, by routinely initiating and coordinating the update process
    - Undertake the coordination and provision of secretarial services for the regular meetings of National Operational Authorities proposed in the regional plan.
    - Provision of a dedicated Technical Officer responsible for promoting spill preparedness and response capacity in the SACEP region
    - Co-ordination of spill preparedness and response capacity building activities such as training and exercises in the SACEP region.

2. National focal points to brief their respective national representatives on the Governing Council of SACEP prior to the GC meeting to ensure they are clear on the subject matter and the discussions that took place during the Exercise and Workshop.

3. National focal points to consider extending an invitation to the other countries in the SACEP region to attend as observers any suitable planned response exercise or an actual incident response operation.

4. The report of the Regional Exercise and Workshop, including the Action Plan and the Regional Contingency Plan with agreed amendments in track changes to be sent to participants of the Regional Exercise and Workshop by early December 2015.

5. National focal points to submit to SACEP completed Annexes I – III of the Regional Contingency Plan by early January 2016.

6. Assuming completion of Governing Council Meeting in January 2016, IMO and SACEP to arrange a Regional Workshop of National Focal Points/Operational Authorities towards the end of Q1 2016 to discuss the outcome of the Governing Council Meeting, develop a program of training and exercises to enhance regional capacity building in spill preparedness and response for the next 3 years and if time allows provide training on HNS preparedness and

Note: At the completion of the workshop, all attendees were given a disc with every presentation from the workshop for their own reference.

Annex 7 - SACEP Regional plan amended as per the agreed proposals outlined in Annex 3

REGIONAL OIL AND CHEMICAL POLLUTION CONTINGENCY PLAN FOR SOUTH ASIA

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Background

1.1.1 The Regional Seas Programme was initiated by UNEP in 1974. Since then the governing council of UNEP has repeatedly endorsed a regional approach to the control of marine pollution and the management of marine and coastal resources and has requested the development of regional action plans.

1.1.2 Following the report of a mission to the coastal States by a consultant appointed by UNEP, the South Asia Seas region was established by UNEP in 1983 (Governing Council Decision 11/7). It includes the marine and coastal areas of Bangladesh, India, Maldives, Pakistan and Sri Lanka. The region was included in the Regional Seas Programme in close collaboration with the South Asian Co-operative Environmental Programme (SACEP) and governments in the region.

1.1.3 The International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC) facilitates international co-operation and mutual assistance in preparing for and responding to a major oil pollution incident and encourages States to develop and maintain an adequate capability to deal with oil pollution emergencies. The basic obligation of this convention is for parties to establish a national system for responding promptly and effectively to oil pollution incidents which have, as a basic minimum, a national oil spill contingency plan, designated national authorities and operational focal points responsible for oil pollution preparedness and response, reporting and handling requests for assistance. In order to facilitate the operational aspects of oil spill monitoring and response, the OPRC Convention encourages parties to conclude bilateral or multilateral agreements for oil pollution preparedness and response.

1.1.4 India and Pakistan are the only countries in the region to have ratified the OPRC 1990 Convention. In order to assist the countries to ratify and implement this convention, UNEP in 1995 adopted the project “Development and Implementation of National and Regional Oil Spill Contingency Planning” as one of the six priority projects in its South Asia Regional Seas Action Plan. Prior to the adoption of this Action Plan, a UNEP/UNDP/IMO mission conducted in 1989, compiled a South Asian Marine Pollution Emergency Action Plan which has not been up-dated since.

1.1.5 The South Asia Co-operative Environment Programme (SACEP) and the IMO have now undertaken a jointly funded project to assist the region in developing a South Asian Regional Oil Spill Contingency Plan. A Regional Oil and Chemical Pollution Contingency Plan and other background documents were reviewed by a meeting of senior officials held in Colombo Sri Lanka 14th to 16th December 1999. The final Plan was then submitted to a “High Level Meeting” which approved it on the 6th December 2000 prior to its formal acceptance by the Government of Bangladesh, India, Maldives, Pakistan and Sri Lanka

<u>Maritime Oil Traffic</u>

1.1.6 South Asia not only imports much of its own consumption of oil, but India, Maldives, Pakistan, Bangladesh and Sri Lanka lie close to the main shipping route from the Middle East to the Far East.

Existing Response Capability in the Region

1.1.7 Although there is some capacity within the Region to respond to spills in harbour and at sea and the five countries continue to develop or enlarge their capabilities, the response to a major oil or chemical spill at sea would probably require the co-operation of the other States in the Region, or assistance from further afield. A Regional Plan is an important first step towards supplementing individual States' response capabilities.

1.2 Purpose and Objectives

1.2.1 The purpose of this Contingency Plan is to establish a mechanism for mutual assistance, under which the competent national Authorities of Bangladesh, India, Maldives, Pakistan and Sri Lanka will co-operate in order to co-ordinate and integrate their response to marine pollution incidents either affecting or likely to affect the territorial sea, coasts and related interests of one or more of these countries, or to incidents surpassing the available response capacity of each of these countries alone.

1.2.2 The general objective of the Plan is to organise a prompt and effective response to spills affecting or likely to affect the area of responsibility of one or more of the countries concerned and to facilitate their co-operation in the field of oil and chemical pollution preparedness and response.

1.2.3 For this purpose the following specific objectives are defined to:

a) define areas of responsibility of the Member State to the Plan;

b) determine the extent of co-operation for the implementation of the Plan between the responsible authorities, at the operational level;

c) specify the type of assistance which might be provided and the conditions under which it will be provided;

d) divide the responsibilities and to provide for the transfer of responsibility from one Member State to another;

e) establish the principles of command and liaison, and to define the corresponding structures;

f) determine, in advance, the financial conditions and administrative modalities related to co-operative actions in case of emergency.

1.2.4 In order to achieve these objectives, the following actions referred to in the OPRC Convention are needed to implement the Regional Contingency Plan:

a) developing national preparedness measures including an appropriate organisation and effective systems for detecting and reporting pollution incidents affecting or likely to affect the area of responsibility of the Member States;

b) promoting and implementing regional co-operation in oil and chemical pollution contingency planning, prevention, control and clean-up operations;

c) establishing a minimum level of pre-positioned response equipment to restrict spreading and to minimise the hazard posed by oil and chemical spills;

d) developing and implementing a programme of training courses and practical exercises for different levels of personnel involved in oil pollution prevention and combating;

e) developing procedures to increase regional co-operation.

1.2.5 The Member States agree that response operations in case of a marine pollution incident which occurs within the area of responsibility of one of the Member States will be conducted in accordance with provisions of the National Contingency Plan of the Member State concerned.

1.3 Scope and Geographical Coverage

1.3.1 This Plan is intended to be a regional agreement between the following countries: Bangladesh, India, Maldives, Pakistan and Sri Lanka.

1.3.2 It applies to the waters which are under the jurisdiction of the Member States for pollution purposes, including the Exclusive Economic Zone (EEZ) or pollution zone, the territorial sea and internal waters. The plan may also refer to incidents involving pollution by oil or chemical or threat thereof, to the coastline or related interests of a Member State, from a marine casualty on the high seas. (The response to pollution in inland waterways which cross international boundaries would be a matter for bilateral arrangement between the riparian States..)

1.3.3 The Plan identifies the responsible authorities in each country, prescribes a co-ordinated response structure and establishes a method of operation for a joint response to an incident thus building on the co-operative framework already in place within the region.

1.3.4 The Plan applies to marine spills of oil and hazardous substances which cause or could cause damage to the environment in countries neighbouring the source of the incident. It may also apply when only one country is affected but the magnitude is such that the incident requires assistance from another country.

1.4 Definitions, Acronyms and Abbreviations

For the purpose of this plan:

1.4.1 ***Oil*** means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products.

1.4.2 ***Harmful substance*** means any substance including oil, the escape or discharge of which is liable to create a hazard to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea and adjacent coastal areas.

1.4.3 ***Pollutant*** has the same meaning as harmful substance.

1.4.4 ***Maritime casualty*** means a collision of vessels, stranding or incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo.

1.4.5 ***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 substance and which poses or may pose a threat to marine environment, or to the coastline or related interests of one or more States, and which requires emergency action or other immediate response.

1.4.6 ***Related interests*** mean the interests of a coastal State directly affected or threatened, and included among other things:

a) activities in coastal waters, in ports and estuaries, including fishing activities;

b) the historical and tourist appeal of the area in question, including water sports and recreation;

c) the health of the coastal population; and

d) the preservation of living resources.

1.4.7 The ***Plan*** means the Regional Oil and Chemical Marine Pollution Contingency Plan for the countries of South Asia.

1.4.8 ***Member States*** refers to the following countries - Bangladesh, India, Maldives, Pakistan and Sri Lanka.

1.4.9 ***Area of responsibility*** means the coasts, internal waters, territorial waters and EEZ of Bangladesh, India, Maldives, Pakistan and Sri Lanka, as established in accordance with international law.

1.4.10 ***Lead country*** means the Member State in whose area of responsibility a maritime casualty has occurred and which has activated the Plan or asked for assistance within the framework of the Plan, or the Member State to whom the lead role has been transferred. Lead Country exercises the Operational Command of the Joint Response Operations and designates the Supreme On-Scene Commander (SOSC).

1.4.11 ***Lead Authority*** means the Operational Authority of the Lead Country.

1.4.12 ***Government authority*** means the designated competent government department having the political and governmental responsibility for dealing with accidental marine pollution.

1.4.13 ***Operational Authority*** means the designated competent government department having the operational responsibility for dealing with accidental marine pollution.

1.4.14 ***Joint Response Operations (JROs)*** means counter pollution operations involving two or more of the Member States, including strike teams, equipment and other resources (aircraft, vessels) rendered as assistance by other Member States as well as national resources of the Lead Member State.

1.4.15 ***Operational Command*** means overall co-ordination and control. It is exerted by the Operational Authority of the Lead Country, through the ***Supreme On-Scene Commander (SOSC)***.

1.4.16 ***Operational Control*** means direct control over personnel, means and units taking part in the response operations, including giving orders and supplying information necessary for execution of response operations. It is exerted by ***National On-Scene Commanders (NOSC)*** of the Member States taking part in the operations or officers delegated by them.

1.4.17 ***Tactical Command*** means directing and supervising the execution of specific tasks by teams or units on the scene of operations. It is exerted by the leaders of such teams or commanders of units.

1.4.18 ***Supreme On-Scene Commander (SOSC)*** means a designated officer of the Lead Country, having the overall operational command of all Joint Response Operations undertaken within the framework of the Plan.

1.4.19 ***National On-Scene Commander (NOSC)*** means an officer, designated by the Operational Authority, having operational control of all national pollution response resources which might, if so requested, participate in Joint Response Operations. (Note: NOSC is preferably, but not necessarily, the same officer who performs the duty of On-Scene Commander under the National Contingency Plan.)

1.4.20 ***Liaison Officer*** means an officer from the Party participating in the Joint Response Operations, who is integrated in the staff of the SOSC, with a view to providing necessary information on national resources rendered as assistance to the Lead Country and facilitating communications with his/her respective NOSC.

1.4.21 ***Public Relations Officer*** means an officer in charge of informing the public on the course of events and advising the SOSC on public reaction.

1.4.22 ***Emergency Response Centre (ERC)*** means an office, manned 24 hours a day and equipped with appropriate communications equipment, which has been set up, for the purpose of the Plan, by each Party and which will serve as the Operations Room of NOSC or SOSC respectively, whenever the Plan is activated.

1.4.23 ***Joint Emergency Response Centre (JERC)*** means the Response Emergency Centre of the Lead Country.

1.4.24 ***Strike team*** means a group of personnel, sent as assistance from one Member State to another in order to take part as an independent unit in response operations. It may include personnel on board vessels, aircraft or other self-contained units or personnel assisting in shore clean-up operations.

1.4.25 ***Operations at sea*** means any measures, including intervention on the source of pollution, aerial monitoring, containment of the pollutant, recovery of the pollutant, application of treatment agents from vessels and aircraft, or any other action taken at open sea (off shore) in order to respond to a pollution incident, restrict the spreading and facilitate the removal of the pollutant and mitigate the consequences of the incident.

1.4.26 ***Operations on shore (shore clean-up operations)*** means any action taken on shore or at sea immediately adjacent to it, in order to recover, remove or destroy the pollutant and reduce its impact or effects.

1.4.27 ***Pollution Report (POLREP)*** means the report by which one party, usually the Lead Country, informs other relevant parties of the situation.

1.4.28 The following are the main Abbreviations used in this document:

- ERC Emergency Response Centre
- IMO International Maritime Organisation
- IOPC FUND International Oil Pollution Compensation Fund
- JERC Joint Emergency Response Centre
- NCP National Contingency Plan
- NOSC National On-Scene Commander

• OPRC	International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990
• POLREP	Pollution Report
• POC	Point of Contact
• RCP	Regional Contingency Plan
• SACEP	South Asia Co-operative Environment Programme
• SASP	South Asia Seas Programme
• SITREP	Situation Report
• SOSC	Supreme On-Scene Commander
• UTC	Universal Time-Co-ordinated
• VHF	Very High Frequency

2 POLICY AND RESPONSIBILITY

2.1 Exchange of information

2.1.1 Member States shall keep each other correctly informed at all times on:

a) Competent National Authorities, responsible at government level for the implementation of the Plan and on responsible officers within these Authorities (**Annex 1**);

b) National Operational Authorities, responsible at the operational level for the implementation of the Plan and for exercising Operational Command in case of Joint Response Operations, and on responsible officers within these Authorities (**Annex 1**);

c) national Contact Points responsible for receiving reports of pollution incidents (**Annex 1**);

d) designated national Emergency Response Centres (**Annex 1**);

e) designated National On-Scene Commanders (**Annex 1**);

f) at least those parts of their respective National Contingency Plan which might be relevant in case of conducting Joint Response Operations cf. para. 3.7 (**Annex 2**);

g) inventories of pollution response equipment and products, as well as other means (e.g. vessels and aircraft) available in each country for use in Joint Response Operations (**Annex 3**);

h) directories of experts, trained personnel and strike teams designated by each Member State to take part in Joint Response Operations (**Annex 3**):

i) any services or resources that may be of assistance during a pollution incident response

2.1.2 Information listed above shall be attached to the Plan in **Annexes 1, 2** and **3**

2.1.3 Member States shall inform each other through the Secretariat of any changes in the information listed above as soon as these occur, using routine communication channels and supplying relevant changes to the applicable annexes.

2.1.4 Each Operational Authority is responsible for the accuracy of information pertaining to its Member State.

2.1.5 Each Operational Authority shall acknowledge receipt of any changes or modifications regarding the above information and is responsible for updating its copies of the Plan accordingly.

2.1.6 English language shall be used in all communications related to the Plan.

2.2 Designation of National Authorities and points of contact

2.2.1 National Authorities and points of contact shall be designated and updated in **Annex 1**.

2.3 Meetings of National Operational Authorities responsible for the implementation of the Plan

2.3.1 The Operational Authorities, defined in para. 2.2, shall meet regularly, and as a minimum once a year, in order to discuss questions related to the implementation of the Plan, response to actual incidents, organisation of training courses and exercises and other relevant matters.

2.3.2 Regular meetings shall be hosted by each Member State successively, following alphabetical order or as otherwise agreed, to ensure the participation of the National Operational Authority of each Member State. Video conferencing facilitates may be utilised where appropriate.

2.3.3 The Operational Authority of the host Member State shall, in co-operation with the Operational Authorities of the other Member States, prepare the agenda and issue a final report of such annual meeting, or as otherwise agreed.

2.3.4 Secretarial services "Secretariat" will be provided by the Secretariat for the South Asian Seas Programme based in the SACEP Secretariat, who will also support the coordination, planning and preparations for the meetings.

2.4 Joint training and exercises

2.4.1 The Member States shall endeavour to conduct joint training courses and joint exercises. (The joint exercise and training courses need not involve all parties - in the Bay of Bengal it might involve Bangladesh and India, in the Arabian Sea, India and Pakistan, whereas in the southern part of the region only India, Sri Lanka and Maldives). However, participation in such exercise shall not be mandatory. The option for not participating in the exercises shall be intimated well in advance.

The main objectives of these training courses and exercises shall be to:

a) improve the level of co-operation and co-ordination among operational personnel and in particular strike teams of different Member States;

b) test the command structure of the Plan;

c) test communications between the Member States, including procedures for activating the plan and calling for assistance;

d) test the logistic arrangements and facilitation procedures for joint operations, and to rehearse the procedures for operations by foreign aircraft and vessels in national airspace or waters;

e) exercise key officials in the roles they would play in joint operations;

f) achieve satisfactory level of communication among personnel and, in particular, strike teams designated to take part in Joint Response Operations;

g) acquire knowledge in handling equipment, products and other means which might be used in Joint Response Operations; and,

h) enable the personnel from different Member States to gain experience in working together.

2.4.2 The Member States shall endeavour to successively host such training courses and exercises. The host country shall organise the training course or exercise and provide necessary logistic support; however, the expenses for the participants and means deployed in joint exercises shall be borne by their respective Member States. Scheduling programmes, duration and other relevant details concerning such training and exercises shall be decided at regular annual meetings of the Member States. The Member States may seek assistance from IMO or other sources in the planning and conduct of joint training and exercises.

2.4.3 The Member States may also agree to combine joint training courses and exercises.

2.5 Revision and Amendment of the Plan

2.5.1 In order to maintain the applicability of the Plan and ensure it remains up to date, revisions or amendments to the Plan can be made under consensus agreement of the National Operational Authorities of the Member States. In which case such changes would come into effect immediately upon consensus agreement being reached.

3 RESPONSE ELEMENTS AND PLANNING

3.1 Assumption of lead role

3.1.1 The lead role in the implementation of the Plan shall be assumed by the Operational Authority of the Member State whose area of responsibility has been affected or is likely to be affected by a pollution incident and who has activated the Plan.

3.1.2 The Lead Country shall be responsible for:

a) monitoring of the pollution;

b) assessment of the situation;

c) spill movement forecasting; and

d) initiating and exercising Operational Command over Joint Response Operations.

3.1.3 The lead role shall be transferred from one Member State to another only by agreement between the Operational Authorities of the two Member States. This might be when the major part of the pollutant has moved from the area of responsibility of the Member State initially affected and who has activated the Plan, to the area of responsibility of another Member State, or when the main response activities have moved to such other Member State.

3.1.4 When the pollution incident which has occurred in the area of responsibility of one of the Member States directly (imminently) threatens the interests of another Member State, the Member States may also agree, in direct contacts between their Operational Authorities, that the threatened Member State will assume the lead role.

3.2 National On-scene Commander (NOSC) / Supreme On-scene Commander (SOSC)

3.2.1 For the purpose of the Plan, the Operational Authority of each Member State shall nominate an officer who will exercise operational control over all response activities of that Member State, including control over personnel (strike teams), equipment and self-contained units (vessels, aircraft). These officers shall be called National On-Scene Commanders (NOSC).

3.2.2 After the activation of the Plan and commencement of the Joint Response Operations, NOSC of the Lead State shall assume the role of the Supreme On-scene Commander (SOSC). The SOSC shall have the overall responsibility for all decisions and actions taken in order to combat the pollution and to mitigate its consequences and for co-ordination of Joint Response Operations. The SOSC, working in liaison with his/her Lead Authority, exerts Operational Command over Joint Response Operations.

3.2.3 The NOSCs of the assisting Member States shall operate under the overall Operational Command of the SOSC, but shall nevertheless retain operational control over personnel, equipment and self-contained units of their respective Member States.

3.2.4 In order to relieve the SOSC of a part of his/her duties concerning operational control of national resources, the Lead Authority may, at the time of the activation of the Plan,

designate another officer who will have direct operational control of the national resources taking part in the Joint Response Operations and who will act as the NOSC of the lead country.

3.2.5 In exercising his/her functions, the SOSC shall be assisted by a Support Team (cf. para 3.4).

3.2.6 Relevant information concerning NOSCs is given in **Annex 1**.

3.3 Emergency Response Centres and Joint Emergency Response Centre

3.3.1 For the purpose of this Plan, each Member State shall set up an Emergency Response Centre (ERC) manned 24 hours a day, which will be equipped with appropriate communications systems and have necessary facilities to be used as the operations room of the Operational Command in case of Joint Response Operations.

3.3.2 If deemed necessary, each Member State may decide to establish more than one ERC.

3.3.3 In case of the activation of the Plan, the ERC of the Lead Country shall assume the role of the Joint Emergency Response Centre (JERC). The JERC shall serve as the base of the Supreme On-Scene Commander (SOSC) and the main communications centre for all communications related to the implementation of the Plan.

3.3.4 Alternate sites for JERC, closer to the scene of the incident, may be specified if appropriate at the discretion of the Lead Country.

3.3.5 When the lead role is transferred from one Member State to another, the ERC of the Member State assuming the lead role shall automatically become JERC.

3.3.6 Relevant information concerning ERC(s) of each Member State is given in **Annex 1**.

3.4 Support Teams

3.4.1 With a view to assisting NOSC and SOSC each Member State shall set up its national Support Team, composed of the representatives of various relevant public authorities, national services and industry including, in particular, oil and shipping industries.

3.4.2 The role of the Support Teams is advisory, and their functions include:

a) providing assistance to NOSC/SOSC in case of the activation of the Plan;

b) providing advice to NOSC/SOSC concerning, in particular, methods and techniques for combating oil pollution, safety of navigation and salvage, marine biology and fisheries, (radio) communications, public information and compensation for oil pollution damage;

c) providing support and co-ordinating the activities of national public authorities, services and industry which might take part in Joint Response Operations, concerning in particular the provision of personnel, equipment and other resources, logistic support, immigration and customs formalities;

d) monitoring incoming reports and assessing the situation;

e) co-ordinating all reporting on the status of the pollution incident to their respective national Authorities.

3.4.3 After the termination of response operations, the Support Team shall, together with their respective NOSC:

a) review post-incident reports from the NOSC/SOSC on the handling of the pollution incident for the purpose of analysing and introducing recommendations and improvements needed in the Plan and in their respective National Contingency Plans;

b) forward to their respective national Authorities relevant reports and recommendations, including NOSC/SOSC post-incident reports, Support Team debriefing reports and recommendations concerning amendments to the Plan or its Annexes.

3.5 Command Structure

3.5.1 Any Command Structure to be used in Regional/Joint Operations needs to be agreed in advance and well understood by all participating Member States. (An example of a Command Structure for Joint Response Operations is shown in the **Annex 6**)

3.5.2 The Plan distinguishes between:

a) ***Operational Command*** which is overall co-ordination and control of ***Joint Response Operations*** and consists of taking decisions concerning response strategy and defining the tasks of various groups of teams. Following the activation of the Plan, Operational Command over Joint Response Operations is exercised by the Lead Authority through its NOSC who assumes the role of SOSC.

b) ***Operational / Advisory Control*** which is direct control over personnel, means and units taking part in the response operations, including giving orders to specific groups of teams and units for execution of response operations, in accordance with the strategy and the tasks defined by the Operational Command. Operational Control over national resources is exercised by the NOSCs of the respective Parties. (Operational Control over the resources of the Lead State is exercised by an officer designated to act as NOSC in lieu of the officer who has assumed the role of SOSC.)

c) ***Tactical Command*** which consists of directing and supervising the execution of specific tasks by teams or units on the scene. Tactical Command is exercised by the Leader of each team or the Commander of each unit taking part in the response operations.

3.5.3 Liaison between the Lead Authority and the assisting Party shall be maintained, according to the circumstances and to the type and importance of the assistance rendered, in one of the following ways:

a) by direct e-mail, telex, telefax, telephone or radio contacts between the Lead Authority (SOSC) and Operational Authorities (NOSCs) of the assisting Parties;

b) by a Liaison Officer from the assisting Party who is integrated in the staff of the SOSC. His/her duties shall be to provide necessary information on resources rendered as assistance and to facilitate communication with his/her NOSC, ERC, Strike Teams and self-contained units taking part in the operations;

c) by NOSC of the assisting Party who personally attends at the spill site and participates in Joint Response Operations.

3.6 Communications arrangements

3.6.1 Communications for the implementation of the Plan shall be established by the Parties in accordance with **Annex 4**.

3.6.2 English language shall be used in all communications related to the implementation of the Plan.

3.6.3 Important communications by radio or telephone should be confirmed by fax, telex or e-mail or by any other suitable means of communication. This is to include the activation of the plan, requests for assistance, offers of assistance, estimated costs of assistance, acceptance of requests, instructions by the command for the movement and deployment of assisting units, tasks assigned to units and termination of operations.

3.7 Response Planning

3.7.1 Response to a pollution incident within the area of responsibility of each Member State shall be conducted in accordance with the provisions of the NCP of the lead country under the overall Operational Command of the Lead Authority exercised through the SOSC.

3.7.2 In order to facilitate smooth proceeding of Joint Response Operations, the Member States shall inform each other about relevant parts of their NCPs and, in particular, those parts describing:

a) national response organisation;

b) likely sources of oil spills, vulnerable resources and priorities for protection;

c) resources for responding to accidental pollution, available at the national level;

d) rules concerning the use of dispersants; and

e) logistic support available within the country.

Copies of English translations of these parts of NCPs or, preferably, complete NCPs are attached to the Plan at **Annex 2**.

3.7.3 Guidelines, if any, concerning the operation of vessels and aircraft of the assisting Member State within the area of responsibility of another Member State shall be provided by the Lead Authority.

3.8 Response strategy

3.8.1 Deciding upon the response strategy to be applied in each particular pollution incident and planning of specific operations shall be the responsibility of SOSC. In taking such decision the SOSC shall follow the outline given below.

a) assessment of the severity of the incident,

b) activation of the National Contingency Plan and notification of other Member States;

c) selection of appropriate response methods;

d) evaluation of available and required response resources;

e) activation of the Plan and request for assistance;

f) implementation of selected response methods, making use of national resources and resources from assisting Member States;

g) re-assessment of the situation and making necessary modifications in response actions;

h) termination of response operations;

i) de-activation of the Plan;

j) returning to the country of origin of personnel, equipment and other means rendered as assistance by the other Member States.

4 RESPONSE OPERATIONS

4.1 Response Phases

4.1.1 For the purpose of the Plan, pollution response operations have been divided into four distinct phases:

Phase I - Notification
Phase II - Evaluation and activation of the Plan
Phase III - Joint response operations at sea
Phase IV - Joint response operations on shore

4.1.2 It is understood that according to circumstances entire phases or parts thereof may take place concurrently with one or more other phases.

Phase I

4.1.3 Notification and verification of information concerning pollution incidents shall be done, at the national level, in accordance with the provisions of the NCP.

4.1.4 When a major pollution incident has occurred that is one requiring counter-pollution resources to be mobilised, the relevant Operational Authority shall inform the Operational Authorities of the other Member States (cf. para. 2.1 and 5.2) through their National Contact Points immediately after receiving and verifying the incident report, regardless of the need for the activation of the Plan. The relevant Operational Authority in this context is that of the Member State in whose area of responsibility the incident has occurred. Note: The POLREP system (**Annex 8**) is the preferred method of communication/reporting.

4.1.5 Consideration must be used when there has been an incident which may cause pollution but has not yet done so: if the pollution would threaten neighbouring sea areas if it occurred, the neighbouring Member State should be informed. Note: The POLREP system (**Annex 8**) is the preferred method of communication/reporting

Phase II

4.1.6 The Operational Authority of the Member State affected by an incident or the Member State likely to be affected first, shall assess the pollution and determine the type and level of response required and whether or not to activate the Plan.

4.1.6 Before activating the Plan, the Operational Authority of the Member State concerned shall activate its NCP.

4.1.7 The decision to activate the Plan shall be taken by the Operational Authority of the Member State affected by the incident or likely to be affected first. After such a decision has been taken, that Operational Authority shall assume the role of the Lead Authority and shall:

a) inform the Operational Authorities of the other Member States through their designated National Contact Points and in accordance with the procedure described in para. 5.2, that the Plan has been activated, and who has been appointed SOSC;

b) activate its own ERC which shall assume the role of JERC;

c) activate its own Support Team;

d) through the SOSC, with the advice of the Support Team, formulate the strategy to deal with the incident and evaluate the need for assistance from other Member States. SOSC shall initiate phases III and IV of the response respectively;

e) request, on the basis of SOSC requirements and advice, assistance from other Member States.

Phase III

4.1.8 The main objectives of Joint Response Operations at sea are to stop the spillage of the pollutant from the source, to restrict its spreading and movement and to remove as much pollutant as possible from the sea surface before it reaches the shores of one of the Member States.

4.1.9 Joint Response Operations at sea shall be conducted in accordance with the procedures described in the NCP of the Lead Country using primarily national resources, which shall be supplemented, as necessary, by the other Member States at the requests of the Lead Authority. Units of the assisting Member States shall work under direct Operational Control and Tactical Command of their respective NOSCs and unit commanders or team leaders. However, at the discretion of the Assisting Member State, Tactical Command may be directed by the Lead Authority, where appropriate.

Phase IV

4.1.10 The main objectives of Joint Response Operations on shore are to protect sensitive coastal areas in accordance with the priorities outlined in the NCP.

4.1.11 This phase includes treatment and final disposal of collected pollutant and contaminated beach material. It may also include the restoration of polluted areas.

4.1.12 Principles outlined under Phase III shall also apply to Phase IV.

4.1.13 In order to increase the effectiveness of Joint Response Operations on shore, JERC may be transferred, at the discretion of the Lead Authority, to adequate alternative premises closer to the site of operations (cf. para. 3.3). In such cases, the Lead Authority shall duly inform Operational Authorities of the assisting Member States.

4.2 Spill Monitoring

4.2.1 For the monitoring of spill movement and behaviour, aerial monitoring is likely to be most effective although any other suitable means might also be used if the aircraft are not immediately available.

4.2.2 The monitoring of the spill and its movement and transmission of relevant reports to the other Member States, prior to the activation of the Plan, is the responsibility of the Lead Authority. Following the activation of the Plan this responsibility rests with SOSC, who shall take all necessary measures to ensure regular monitoring of the spill and its movement and behaviour, in order to properly assess the situation and decide on adequate response measures. For that purpose, SOSC may request assistance from other Member States.

4.2.3 Following, the specific request of the Lead Authority, aircraft of the assisting Member States may be asked to carry out flights over the specific areas of territory or territorial waters of the Lead Authority which are directly affected by the pollution, for the monitoring of the

pollution within the framework of the plan. In its request, the Lead Authority shall precisely define the aim of the mission and the flight plan. Guidelines, if any, about air and sea operations, including any reservations which Parties may have, should be provided by the Lead Authority. (See also 6.3.2 Over flight Procedures and 6.3.3 Navigation Procedures.)

4.2.4 Reporting procedures, which shall be followed for the purpose of the Plan by the crews of monitoring aircraft, are given at **Annex 5**.

4.3 Requests for Assistance within the Framework of the Plan

4.3.1 Following the activation of the Plan, the Member State who has activated the Plan may request assistance from the other Member States, in any of the cases described in section 1.3.

4.3.2 Assistance might be requested in the form of:

a) trained response personnel and, in particular, strike teams;

b) specialised pollution combating equipment;

c) pollution treatment products; and

d) other means, including, in particular, self-contained units such as vessels and aircraft, and/or any combination thereof.

4.3.3 A request for assistance shall be formulated in a clear and precise manner, using the standard form defined at **Annex 8** (POLREP System**)**. It shall contain detailed description of the kind of assistance required and the purpose for which personnel, equipment, products and other means will be used.

4.3.4 The Member State receiving a request for assistance shall immediately acknowledge receipt.

4.3.5 The Member State or Member States receiving a request for assistance shall use their best endeavours to offer it to the requesting Member State with the shortest possible delay, while not depleting their national resources beyond a reasonable level of preparedness.

4.3.6 With a view to promptly responding to requests for assistance, Member States shall have a part of their national response equipment, products and other means ready for transportation, on short notice, to the other Member States.

4.4 Use of Dispersants

4.4.1 Each Member State shall define its policy regarding the use of dispersants in combating oil pollution and describe it in its NCP. For this purpose, the Member States may be guided by the relevant publications referenced in **Annex 10**.

4.4.2 Each Member State shall inform other Member States in its NCP annexed to this Plan about its policy on the use of dispersants. The information shall include the list of dispersants held by the Member State: it will be for other Member States to consider whether any of the dispersants on the list should not be used in their waters. NCPs should identify specific areas or types of areas where the use of dispersants is restricted or prohibited.

4.4.3 In case of JROs, the Member States shall observe the principle of prior authorisation for the use of dispersants. The authorisation can be given only by SOSC or a person designated by him/her.

4.4.4 In the area of responsibility of each particular Member State, dispersants shall always be used in accordance with the provisions of the NCP of the Member State concerned. If a Member State has prohibited the use of dispersants in its territorial waters, other Member States participating in JROs shall observe this decision.

4.5 Assistance from Outside the Region

4.5.1 It is open to any Member State whose coasts, internal waters, territorial waters or EEZ are polluted or threatened by pollution to request assistance from outside the region.

4.5.2 **Annex 7** to this plan sets out information on resources which might be available from outside the Region and their contact points, including those from oil companies and States which might reasonably be called on under Article 7 of the OPRC Convention.

4.6 Termination of Joint Response Operations and Deactivation of the Plan

4.6.1 The SOSC shall terminate the JROs at his discretion, taking into account

a) whether pollution response measures have been completed, so far as the Lead Country is concerned; or

b) whether or not the pollution threatens the interest of the Lead Country or other Member States or;

c) whether or not the benefits of further counter pollution measures would be justified by their cost; or

d) whether the response has reached a point where the Lead Country can complete it without assistance;

unless any of the other Member States wish to continue the operation as the Lead Authority in accordance with the procedures outlined in 3.1.3.

4.6.2 After taking the decision to terminate the JROs, the SOSC shall immediately inform NOSCs of the other Member States and their respective Operational Authorities of such decision and deactivation of the Plan.

4.6.3 Following the deactivation of the Plan, all personnel, equipment, unused products and other means which took part in the JROs shall return or be returned to their respective countries of origin, unless otherwise agreed - for example the Member States concerned may decide that unused treatment products shall remain in the country that requested the assistance.

4.6.4 The Member State who requested assistance shall take necessary measures for prompt repatriation of the personnel of the assisting Member States, although co-ordination and preparation of necessary arrangements for their repatriation remains the responsibility of their respective Operational Authorities.

4.6.5 The Member State requesting assistance shall be responsible for releasing all equipment rendered as assistance and all unused treatment products so that they can be returned to the country of origin. All equipment used by other Member States shall be returned to its owners clean and, if possible, in working order.

4.6.6 The Member State who requested assistance is responsible for facilitating the departure of all units rendered as assistance from its territory, territorial waters or airspace.

4.6.7 The Member State who requested assistance shall prepare a report on the effectiveness on the personnel, equipment, products and other means received as assistance. These reports shall be circulated to the other Member States.

4.6.8 Joint response operations shall be reviewed during regular meetings of the Parties.

5 REPORTING

5.1 Initial Warning System

5.1.1 Any polluting incident presenting a potential threat to another Member State shall be reported to that country without delay to the emergency centre as in **Annex 1**. The initial notification shall be followed up as soon as possible with a POLREP. **(Annex 8**)

5.2 Pollution Reporting System

5.2.1 For the exchange of information concerning pollution incidents, the Member States shall use the international pollution reporting system (POLREP) which is as described in **Annex 8**.

5.2.2 The Lead Authority shall endeavour to transmit a POLREP, verified by the SOSC, at least once a day.

5.2.3 If pollution combating operations continue at the national level after the deactivation of the Plan, the Member State affected by the incident shall continue to inform other Member States on the situation until the final termination of all pollution response operations.

5.2.4 It is the responsibility of the Operational Authority of each Member State to ensure that the situation reports are transmitted to all interested parties within their country. It is the responsibility of SOSC to ensure that POLREPS and other regular progress reports are communicated to all the units under the SOSC command.

5.3 Post Incident Reports

5.3.1 Following the termination of pollution response operations the SOSC shall prepare the final report including:

a) description of the pollution incident and development of the situation;

b) description of response measures taken;

c) description of assistance rendered by the other Member States (based on reports by the respective NOSCs);

d) assessment of the complete response operation;

e) assessment of assistance rendered by the other Member States;

f) costs incurred during the response by each Member State (in accordance with 6.5);

g) an estimate of environmental and economic damage;

h) description and analysis of problems encountered in responding to the pollution incident;

i) recommendations regarding possible improvement of existing arrangements and, in particular, provisions of the Plan.

5.3.2 Based on that report and their own experience of the incident, the other Member States involved shall prepare recommendations concerning amendments and improvements of the Plan, and if necessary, their NCPs (cf. para. 2.5).

6 ADMINISTRATION, LOGISTICS AND FUNDING

*Note: This section should be read in conjunction with the IMO Assembly Resolution A.869(20), Guidelines for Facilitation of Response to an Oil Pollution Incident Pursuant to Article 7 and Annex of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990, which is attached **as Annex 9** to this Regional Contingency Plan.*

6.1 Logistics, immigration and customs formalities

6.1.1 The Lead Authority is responsible for providing all logistic support necessary within its territory for conducting Joint Response Operations.

6.1.2 In particular the Lead Authority shall appoint a Point of Contact (POC) who shall:

a) be responsible for receiving all vessels and aircraft carrying personnel, equipment, products and other means from the assisting Member States

b) make arrangements for accommodation and transportation within the country, of all assisting personnel;

c) when equipment and other means are received from the assisting Parties, take necessary measures to provide:

- unloading and handling facilities as appropriate, including cranes, fork-lifts, and vehicles as necessary; and
- fuel, lubricants, basic repair, maintenance and cleaning facilities.

6.1.3 The Lead Authority shall ensure assistance to the crews at airports and in ports, as appropriate, and provide security services for ships, aircraft and related equipment, while these are in ports or at airports of the Lead Party.

6.1.4 The security of equipment in storage or being transported in its territory shall be the responsibility of the Lead Party.

6.1.5 In order to facilitate the movement of response personnel and equipment the requesting Member State will:

a) make arrangements for the rapid entry of equipment, products and personnel prior to their arrival; and

b) ensure that, should ships and aircraft be provided, ships are granted all necessary authorisations and aircraft cleared to fly in the national air space.

6.1.6 Each Member State shall endeavour to make, at the national level, special arrangements applicable in emergency situations:

a) provisions for rapid granting of entry visas and work permits for personnel; and

b) ensure that customs formalities are facilitated to the maximum extent. Equipment should be admitted on a temporary basis and products should be admitted free of excise and duties as applicable under National Law.

6.1.7 Details of such arrangements shall be included in the National Contingency Plan of each Member State. This shall set out the information which the assisting Member State must provide to the appropriate national Authorities of the requesting Party in order to facilitate implementation of these special arrangements.

6.1.8 Member States who may offer assistance should hold as much as possible of the necessary documentation with their stockpiles of equipment, or with the headquarters of the units which are designated to assist, so that it does not have to be compiled in an emergency.

6.1.9 The Member States shall designate competent Customs Officers, responsible for prompt clearing of customs formalities in cases of activation of the Plan.

6.1.10 Prior to sending assistance to the Member State who so requests, the Operational Authority of the assisting Member State shall establish direct contact with the competent customs office of the requesting Member State in order to obtain necessary clearance for entry of equipment, products and other means into the country.

6.2 Over flight procedures (see also 4.2 Spill Monitoring)

6.2.1 Within the framework of the Plan and upon the request of the Lead Member State, aircraft of the other Member States might enter and operate in the airspace of the Lead Member State only in the areas specified by the Lead Member State, for one of the following purposes:

a) monitoring flights;

b) transportation of response personnel, equipment and products;

c) spraying of dispersants or other treatment products;

d) other flights related to pollution response operations.

6.2.2 Each Member State shall make, in advance, necessary arrangements concerning rapid granting of permits and clearances for civil aircraft (fixed wing or helicopters) of other Member States, who might be requested to take part in response operations within its airspace. Similar arrangements shall be made for the use of airport facilities by civilian fixed wing aircraft and helicopters engaged in JROs.

6.2.3 Overflight for the above-mentioned purposes, of the national territory or territorial waters of one of the Member States, by military aircraft of the other Member States, shall be decided mutually on a case-by-case basis by the Member States concerned.

6.2.4 Military aircraft of an assisting Member State engaged in maritime spill response operation must not enter the airspace of another Member State unless specifically requested to do so by the Lead Authority.

6.3 Navigation procedures

6.3.1 Within the framework of the Plan and upon the request of the Lead Country, vessels of the other Member States might enter and operate in the territorial waters of the Lead Country only in the area specified by the Lead Country, for one of the following purposes:

a) salvage operations;

b) pollution response operations, including containment and recovery of spilled products, spraying of dispersants or other treatment products, storage and transportation of recovered pollutant;

c) transportation of response personnel, equipment and products;

d) any other voyage related to pollution response operations.

e) any other voyage (e.g. Search and Rescue, Medivac)

6.3.2 Each Member State shall make in advance necessary arrangements concerning rapid granting of permits and clearances for the navigation of civil vessels (vessels and specialised anti-pollution vessels) of other Member States, who might be requested to take part in response operations within its internal and territorial waters. Similar arrangements shall be made for the use of port facilities by civilian vessels engaged in JROs.

6.3.3 Navigation for the above-mentioned purposes, in the internal or territorial waters of one of the Member States, by naval vessels of the other Member States, shall be decided mutually on a case-by-case basis by the Member States concerned.

6.3.4 Naval vessels of an assisting Member State engaged in maritime spill response operations must not enter the territorial sea or internal waters of another Member State unless specifically requested to do so by the Lead Authority.

6.3.5 In all cases the provisions of the International Convention on Facilitation of International Maritime Traffic as amended, shall be observed by the Member States concerned.

6.4 Financial Procedures

In requesting and rendering assistance, the Member States shall observe the following recommendations and principles concerning financial matters related to mutual assistance as appropriate:

6.4.1 The Member States shall inform each other in advance on the wages of personnel, the rental rates for equipment and other means and the cost of treatment products, which might be rendered as assistance. This information shall be included at **Annex 3** and regularly updated by each Member State preferably by the beginning of each year.

6.4.2 The Member States shall endeavour to harmonise their rates and discuss all relevant questions during the regular annual meetings of the Operational Authorities (cf. para. 2.3). However, privately listed resources will be governed by the prevailing rates at the time of the incident.

6.4.3 The assisting Member State shall, immediately following receipt of the request for assistance, submit to the requesting Member State an estimate of the costs of assistance.

6.4.4 If assistance is provided the assisting Member State, they will submit an invoice for the cost as soon as possible after the termination of operations to the requesting Member State. The invoice shall itemise the costs, which shall be clearly related to the tasks performed and if possible should be verified independently.

6.4.5 The following items shall be included in the invoice:

a) wages of personnel engaged in JROs, calculated on the basis of the price list given at **Annex 3** and the daily work logs approved by the SOSC or another responsible officer of the Lead Country;

b) costs of rental of equipment and means calculated on the basis of the price list given at **Annex 3** and daily work logs approved by the SOSC or another responsible officer of the Lead Country;

c) cost of treatment products used during JROs calculated on the basis of the price list given at **Annex 3** and the daily work logs approved by the SOSC or another responsible officer of the Lead Country;

d) all expenses listed in para. 6.5.12 below; and

e) costs for replacement of equipment damaged beyond repair during the JROs.

6.4.6 Financial records and invoices shall be prepared in accordance with the guidelines provided by IOPC Fund in its "Claims Manual" (See **Annex 10**)

6.4.7 The requesting Member State shall pay to the assisting Member State all agreed expenses incurred in rendering such assistance, according to the invoice.

6.4.8 Following the transfer of the lead role, the Member State who has assumed the lead role shall bear all expenses related to the assistance rendered by other Member States. It will be important that financial records show the dates on which costs were incurred.

6.4.9 If the Member State who requested assistance decides to withdraw the request for whatever reason, it shall nevertheless, pay to the assisting Member State all the expenses incurred up to the moment when the request was withdrawn or the personnel and equipment return to their country of origin, as appropriate.

6.4.10 The Member States shall resolve all questions related to financial matters after the termination of joint operations. In cases of dispute the Secretariat will provide for a mutually acceptable resolution procedure.

6.4.11 The provisions of this section shall be considered on a case-by-case basis and shall not prejudice the resolution of any dispute involving third parties which may arise respecting liability and compensation for damages resulting from any pollution incident, wherever it may occur. It shall be for the Lead Member State to pursue its own claim for reimbursement of pollution response related costs, submitted to the party liable for pollution incident, its insurers or an international system for compensation of pollution damages, as appropriate. Payment of those rendering assistance must not depend on the success of claims for compensation from third parties.

6.4.12 In case of JROs the requesting Member State shall directly cover the following expenses related to the stay in its territory of personnel, equipment and means (including vessels and aircraft) of the assisting Member State:

a) board and lodging or daily subsistence allowance as appropriate, of response personnel other than the crews of ships and vessels, unless this was provided by the requesting Member State;

b) any port dues for vessels and ships rendered as assistance;

c) any airport dues for aircraft rendered as assistance;

d) fuel, as might be necessary, for all equipment and means including, in particular, vessels and aircraft, engaged in JROs;

e) medical services provided to injured and ill personnel of the assisting Member State;

f) costs related to repatriation of any person who died, was injured or taken ill during JROs;

g) maintenance and cleaning costs for any piece of equipment, vessel and aircraft engaged in JROs;

h) repair costs for any piece of equipment, vessel and aircraft, damaged in its territory during and due to the JROs, if such repair needs to be made prior to returning it to its country of origin;

i) costs of communications related to the JROs incurred by the assisting Member State in the territory of the Lead Member State.

6.4.13 The assisting Member State shall directly cover the following expenses:

a) mobilisation of personnel, equipment, products or other means;

b) costs of transport to and from the country where JROs are taking place, of personnel, equipment and products;

c) fuel for vessels and aircraft proceeding to the site of JROs under their own power;

d) costs of communications related to JROs originating from the territory of the assisting Member State;

e) medical services rendered, following their return, to any of their own nationals injured or taken ill during JROs;

f) maintenance and repair costs for equipment and means engaged in JROs incurred after their return.

6.5 Medical Insurance and Medical Assistance

6.5.1 Each Member State shall take necessary measures to insure against death, illness and injury, its own personnel who might participate in JROs.

6.5.2 The Lead Countryshall endeavour to offer the best possible initial medical care and services to any person from another Member State who was injured or taken ill during his/her participation in JROs.

6.5.3 The Lead Country shall facilitate repatriation of assisting personnel injured or taken ill during JROs.

6.5.4 The costs of hospitalisation and medical assistance rendered within the Lead Country to injured or ill personnel of the assisting Member State shall be borne by the Lead Country. The Lead Country might decide to claim the reimbursement of all such costs from the party responsible for the pollution incident, its insurer or an international system for compensation of pollution damages as appropriate.

6.5.5 The Member States shall waive the right to make claims against each other for the reimbursement of costs of medical care rendered to persons injured and taken ill during JROs.

6.6 Responsibility for Injury and Damage

6.6.1 If those called upon to assist in the response operations cause, at the site of operations, any damages to third parties, and these damages are related to the response operations, such

damages shall be the responsibility of the Member State who had requested assistance, except if the damages are caused by the gross negligence of the assisting Member State.

6.6.2 The provisions of this paragraph shall apply also in case of joint exercises.

6.7 Documentation of Response Operations and Related Costs

6.7.1 SOSC shall take necessary measures to ensure that detailed records of all actions taken in order to respond to a pollution incident, within the framework of the Plan, are accurately kept. For this purpose, SOSC might include a record keeping officer or financial controller in his/her Support Team.

6.7.2 At least the following records shall be regularly kept:

a) Description of the situation, decisions taken and implemented response measures;

b) Daily work log, giving details of:

- operations in progress (place, time, purpose)
- equipment and other means in use (place, time, purpose);
- personnel employed (number, time);
- response products and other material (e.g. fuel) consumed (quantity, purpose).

c) Records of all expenditures made in relation to pollution response operations.

d) Number of incidents/injuries

6.7.3 Following the termination of the response operations, such records shall be made available to the national Authority responsible for the submission of claims for compensation.

7. PUBLIC INFORMATION

7.1 Public Relations Officer (PRO)

7.1.1 After the activation of the Plan, the Lead Authority shall designate a Public Relations Officer (PRO) who shall be seconded to the SOSC's Support Team.

7.1.2 PRO shall be responsible for:

a) maintaining contacts with the press;

b) preparing press releases on behalf of the SOSC and the Lead Authority

c) following information released by the press and clarifying possible misunderstandings; and

d) press reports provided to assisting Member States.

7.2 Press Releases

7.2.1 Press releases shall be prepared and distributed to the press at least once a day during the entire period between the activation and the deactivation of the Plan.

7.2.2 Press releases shall be prepared by the PRO on the basis of accurate facts provided by the SOSC and/or his/her support Team. They shall contain information concerning:

a) pollution incident and development on the situation;

b) injuries of personnel and damages to vessels, equipment, etc.;

c) vessels involved, type of characteristics of the pollutants, etc.;

d) measures taken to combat pollution;

e) progress of response measures.

7.2.3 The following guidelines shall be observed when preparing press releases:

a) prepare titles/headlines;

b) give primarily the most recent and important information;

c) use simple sentences and give only one idea per sentence;

d) avoid quoting estimates, conjectures, and suppositions;

e) avoid giving opinions on environmental or other unquantifiable damages; and

f) draft carefully final wordings.

7.2.4 Maps showing the area of incident, evolution of the spill and sites of response operations should accompany press releases whenever possible.

7.2.5 All press releases shall be vetted and approved by the SOSC before distribution to the press.

7.3 Press Conferences

7.3.1 After the activation of the Plan, the Lead Authority may decide, in consultation with the SOSC, to organise one or more press conferences for briefing the media.

7.3.2 The following persons may take part in such press conferences:

a) SOSC

b) specially designated expert members of the Support Team

c) PRO

d) representative(s) of the Lead Authority

e) representative of the other Member States (e.g. Liaison Officers or NOSCs)

f) representative of ship and cargo owners and/or their insurers.

7.3.3 Written information on main facts concerning the pollution incident and JROs, maps and photographs may be prepared in advance by the PRO and approved by SOSC for use during the press conference.

7.3.4 Guidelines concerning the preparation of press releases (cf. para.7.2) shall also be observed by participants in press conferences.

* * *

Annexures to Regional Oil and Chemical Pollution Contingency Plan for South Asia

Annex 1:	Directory of Competent National Authorities, Contact Points, Emergency Response Centres, National On-Scene Commanders and Other Relevant Addresses
Annex 2	National Contingency Plans (Or Relevant Parts Thereof)
Annex 3	Directory Of Response Personnel and Inventory of Response Equipment, Products and other means which each Party might offer as assistance in case of the activation of the Plan including information relating to the wages of personnel, the rental rates of equipment and the cost of materials.
Annex 4:	Communication System
Annex 5:	Guidelines for Reporting Oil Spills (Aerial Monitoring)
Annex 6:	Command Structure Template - Example
Annex 7:	Resources which might be made available from outside the Region, and their contact points
Annex 8:	Requesting Assistance – POLREP Pollution Reporting System
Annex 9:	IMO Assembly Resolution A.869 (20), Guidelines for Facilitation of Response to an Oil Pollution Incident Pursuant to Article 7 and Annex of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990
Annex 10:	References

Annexure 1

(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

DIRECTORY OF COMPETENT NATIONAL AUTHORITIES, CONTACT POINTS, EMERGENCY RESPONSE CENTRES, NATIONAL ON-SCENE COMMANDERS AND OTHER RELEVANT ADDRESSES

Bangladesh

Competent National Governmental Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Competent National Operational Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National Contact Point (operational 24 hrs a day) Responsible for Receiving Reports on Pollution Incidents

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Emergency Response Centre

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National On-Scene Commander

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

India

Competent National Governmental Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Competent National Operational Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National Contact Point (operational 24 hrs a day) Responsible for Receiving Reports on Pollution Incidents

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Emergency Response Centre

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National On-Scene Commander

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Maldives

Competent National Governmental Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Competent National Operational Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National Contact Point (operational 24 hrs a day) Responsible for Receiving Reports on Pollution Incidents

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Emergency Response Centre

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National On-Scene Commander

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Pakistan

Competent National Governmental Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Competent National Operational Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National Contact Point (operational 24 hrs a day) Responsible for Receiving Reports on Pollution Incidents

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Emergency Response Centre

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National On-Scene Commander

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Sri Lanka

Competent National Governmental Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Competent National Operational Authority

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National Contact Point (operational 24 hrs a day) Responsible for Receiving Reports on Pollution Incidents

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Emergency Response Centre

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

National On-Scene Commander

Title

Address:

Telephone:

E-mail:

Telex:

Telefax:

Working Hours:

Annexure 2

(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

NATIONAL CONTINGENCY PLANS (OR RELEVANT PARTS THEREOF)

Bangladesh

Pr = preparedness, Re = response	At Sea		On Shore	
	Pr	***Re***	***Pr***	***Re***
Governmental Level				
Central Authorities				

SUMMARY DESCRIPTION OF THE NATIONAL CONTINGENCY PLAN

TITLE

Prepared:

Became Effective (year):

SCOPE

Geographical Coverage:

Applicable to Pollution by:

Levels of Emergency:

RESPONSIBILITIES

According to administrative division (geographically)

According to administrative hierarchy (decision-making)

RELATION TO OTHER CONTINGENCY PLANS

REPONSE STRATEGY:

USE OF DISPERSANTS
(Policy):

SENSITIVE AREAS:

India

Pr = preparedness, Re = response	At Sea		On Shore	
	Pr	***Re***	***Pr***	***Re***
Governmental Level				
Central Authorities				

SUMMARY DESCRIPTION OF THE NATIONAL CONTINGENCY PLAN

TITLE

Prepared:

Became Effective (year):

SCOPE

Geographical Coverage:

Applicable to Pollution by:

Levels of Emergency:

RESPONSIBILITIES

According to administrative division (geographically)

According to administrative hierarchy (decision-making)

RELATION TO OTHER CONTINGENCY PLANS

REPONSE STRATEGY:

USE OF DISPERSANTS
(Policy):

SENSITIVE AREAS:

Maldives

Pr = preparedness, Re = response	At Sea		On Shore	
	Pr	***Re***	***Pr***	***Re***
Governmental Level				
Central Authorities				

SUMMARY DESCRIPTION OF THE NATIONAL CONTINGENCY PLAN

TITLE

Prepared:

Became Effective (year):

SCOPE

Geographical Coverage:

Applicable to Pollution by:

Levels of Emergency:

RESPONSIBILITIES

According to administrative division (geographically)

According to administrative hierarchy (decision-making)

RELATION TO OTHER CONTINGENCY PLANS

REPONSE STRATEGY:

USE OF DISPERSANTS
(Policy):

SENSITIVE AREAS:

Pakistan

Pr = preparedness, Re = response	At Sea		On Shore	
	Pr	***Re***	***Pr***	***Re***
Governmental Level				
Central Authorities				

SUMMARY DESCRIPTION OF THE NATIONAL CONTINGENCY PLAN

TITLE

Prepared:

Became Effective (year):

SCOPE

Geographical Coverage:

Applicable to Pollution by:

Levels of Emergency:

RESPONSIBILITIES

According to administrative division (geographically)

According to administrative hierarchy (decision-making)

RELATION TO OTHER CONTINGENCY PLANS

REPONSE STRATEGY:

USE OF DISPERSANTS
(Policy):

SENSITIVE AREAS:

Sri Lanka

Pr = preparedness, Re = response	At Sea		On Shore	
	Pr	***Re***	***Pr***	***Re***
Governmental Level				
Central Authorities				

SUMMARY DESCRIPTION OF THE NATIONAL CONTINGENCY PLAN

TITLE

Prepared:

Became Effective (year):

SCOPE

Geographical Coverage:

Applicable to Pollution by:

Levels of Emergency:

RESPONSIBILITIES

According to administrative division (geographically)

According to administrative hierarchy (decision-making)

RELATION TO OTHER CONTINGENCY PLANS

REPONSE STRATEGY:

USE OF DISPERSANTS (Policy):

SENSITIVE AREAS:

Annexure 3

(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

DIRECTORY OF RESPONSE PERSONNEL AND INVENTORY OF RESPONSE EQUIPMENT AVAILABLE TO OTHER PARTIES

The listing of personnel, equipment or other means of response here does not mean that it can always be made available. Availability depends on the circumstances of the spill, the current employment of the personnel or state of the equipment, and other demands that might be placed on them. The precise details of assistance to be made available in any incident will be a matter for discussion between the requesting party and the assisting party.

***Note**: each Member State to the Regional Plan should produce a section of this annex listing the personnel and equipment that it could make available to the other Member States on request under the terms of the Plan. The form of the annex shown here does not need to be followed precisely, provided sufficient information is shown to guide the Lead Country to make sensible requests for assistance. The cost information, however, is important: it should be shown here, preferably expressed in $US. Exceptionally the annex could indicate that cost information would be made available on request during an incident. Assistance should neither be requested nor provided unless its cost was agreed by the two Member States concerned beforehand.*

Bangladesh

Type	Quantity	Provider	Location	Cost (Where appropriate.)

Type: the nature of the personnel, equipment, products that might be made available

Quantity: numbers of personnel, vessels, vehicles etc. that might be made available

Provider: the employer of personnel or the owner of equipment (Government, local authority, oil company, shipping company, commercial responder etc.).

Location: where the personnel are based or the equipment is stored.

India

Type	Quantity	Provider	Location	Cost (Where appropriate)

Type: the nature of the personnel, equipment, products that might be made available

Quantity: numbers of personnel, vessels, vehicles etc. that might be made available

Provider: the employer of personnel or the owner of equipment (Government, local authority, oil company, shipping company, commercial responder etc.).

Location: where the personnel are based or the equipment is stored.

Maldives

Type	Quantity	Provider	Location	Cost (Where appropriate)

Type: the nature of the personnel, equipment, products that might be made available

Quantity: numbers of personnel, vessels, vehicles etc. that might be made available

Provider: the employer of personnel or the owner of equipment (Government, local authority, oil company, shipping company, commercial responder etc.).

Location: where the personnel are based or the equipment is stored.

Pakistan

Type	Quantity	Provider	Location	Cost (Where appropriate)

Type: the nature of the personnel, equipment, products that might be made available

Quantity: numbers of personnel, vessels, vehicles etc. that might be made available

Provider: the employer of personnel or the owner of equipment (Government, local authority, oil company, shipping company, commercial responder etc.).

Location: where the personnel are based or the equipment is stored.

Sri Lanka

Type	Quantity	Provider	Location	Cost (Where appropriate)

Type: the nature of the personnel, equipment, products that might be made available

Quantity: numbers of personnel, vessels, vehicles etc. that might be made available

Provider: the employer of personnel or the owner of equipment (Government, local authority, oil company, shipping company, commercial responder etc.).

Location: where the personnel are based or the equipment is stored.

* * *

Annexure 4

(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

To be updated at a later stage

COMMUNICATIONS

Note: what follows is an outline that the Member States will need to discuss amongst themselves, providing the relevant details.

Section 3.6 of the Regional Oil and Chemical Spill Contingency Plan for South Asia ("the Plan") deals with communications arrangements by reference to this Annex. The Annex sets out the way in which communications will be made among the Member States for:

a) Routine exchange of information when there is no emergency.

b) Exchange of information between the Member States when there is an incident which requires or may require the activation of the Plan.

c) Operational communications during Joint Response Operations including those related to
- Operational Command
- Operational Control
- Tactical Command

ROUTINE EXCHANGE OF INFORMATION

For communications among the Operational Authorities of the Member States and for the exchange of information relevant to the maintenance of the regional system for preparedness and response Member States should use ordinary public switched networks. The use of telefax, telex or e-mail should be given preference, although telephone may be used as necessary.

Exchange of information between the Member States when there is an incident that requires or may require the activation of the Plan

For alerting other Member States, informing them of the activation of the Plan, requesting assistance and for maintaining subsequent contacts the Member States should use ordinary public switched networks using the numbers listed in **Annex 1**. All alerts and POLREP messages should be sent in written form using telefax, telex or e-mail. Such messages should be immediately acknowledged by the recipients.

OPERATIONAL COMMUNICATIONS DURING JOINT RESPONSE OPERATIONS

OPERATIONAL CONTROL

Normally, Operational Command will be exercised by the Supreme On-Scene Commander (SOSC) from the Joint Emergency Response Centre (JERC). For transmission of his orders the SOSC should use:

a) ***Public Switched Networks*** for shore-shore communications with ERCs and NOSCs of other Parties.

b) ***VHF Radio*** for shore-sea communications with units taking part in the response operations. VHF Channels to be used are listed *(to be completed at a later stage)*.

c) ***Coast Radio Stations on MF frequencies*** should be used when vessels are outside VHF range. MF frequencies to be used are listed *(to be completed at a later stage)*.

d) Some vessels involved may be fitted with ***satellite communications systems***. The Captain or Master of such vessels should advise the JERC if they advise that these systems should be used during joint operations. The national operations centres – which may become Emergency Response Centres – that are fitted with satellite communications equipment are listed *(to be completed at a later stage)*. Vessels with satcoms can also be contacted through the ordinary public switched network.

e) ***Mobile telephone systems***, where these exist with suitable coverage, may be useful for shore-shore or shore-sea communications.

COMMUNICATION PLAN

At an early stage of the incident the SOSC should issue a ***Communication Plan*** listing the methods and frequencies to be used for communications with the JERC.

Operational Control

Communications for conducting response operations between the relevant National On-Scene Commander (NOSC) and the response units and strike teams under his or her command should be as follows:

a) ***Public Switched Networks*** for shore-shore communications with ERCs and NOSCs of other Parties.

b) ***VHF Radio*** for shore-sea or sea-sea communications with and between units taking part in the response operations. Portable VHF sets may be useful here if they are available. VHF Channels to be used are listed *(to be completed at a later stage).*

c) ***Coast Radio Stations on MF frequencies*** should be used when vessels are outside VHF range. MF frequencies to be used are listed *(to be completed at a later stage).*

d) ***Mobile telephone systems***, where these exist with suitable coverage, may be useful for shore-shore or shore-sea communications.

e) ***Portable Satellite Communications Systems*** may be used by some responders, including commercial response organisations.

COMMUNICATION PLANS

At an early stage of the incident NOSCs should issue ***Communication Plans*** listing the methods and frequencies to be used for communications with the response units under their control.

TACTICAL COMMAND

Communications at the scene of response operations, concerning the direction and supervision of response activities by the teams and units involved, as well as exchange of information between those response teams and units should be maintained using:

a) ***VHF Radio*** for shore-shore, shore-sea or sea-sea communications with and between units taking part in the response operations. Portable VHF sets may be useful here if they are available. For communications with aircraft see below. VHF Channels to be used are listed *(to be completed at a later stage).*

b) ***Mobile telephone systems***, where these exist with suitable coverage, may be useful for shore-shore or shore-sea communications.

COMMUNICATIONS WITH AIRCRAFT

Preferably aircraft taking part in oil spill monitoring or dispersant spraying operations should be fitted with Marine Band VHF equipment, or portable equipment should be carried. The equipment should be capable of working on the channels listed under *(to be completed at a later stage).*

Otherwise vessels and shore stations will not be able to communicate with aircraft unless they have the appropriate HF equipment, or can pass messages through airports or other centres so equipped.

Mobile phones should not generally be used on board aircraft.

Use of Mobile Telephonics with Fax

When other means of transmission of important text messages are not available it is possible that mobile phones could be used, connected to fax machines.

* * *

Annexure 5

(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

GUIDELINES FOR REPORTING OIL SPILLS **(AERIAL MONITORING)**

1 INTRODUCTION

Aerial monitoring of oil spills is made either from helicopters or from fixed-wing aircraft. It could be made using sophisticated remote sensing equipment, however, visual aerial observation is often the most convenient means of assessing oil pollution at sea and on shore, which if properly carried out, can give an important indication, sometimes of a decisive nature, concerning:

- the extent of pollution (overall surface totally or partly covered);
- the evolution of pollution and its follow-up;
- the quantity of floating oil;
- the evaluation of the threat;
- the selection of appropriate combating techniques;
- the evaluation of the effectiveness of means used;
- the assessment of damage.

Unfortunately, aerial monitoring is in most cases done by personnel not specifically trained in this activity (pilots, photographers, aerial navigators), which in turn often results in unreliable and inaccurate reports. In order to ensure that the information provided by observers is precise and quantifiable enough to be of use for the authorities responsible for pollution combating, an attempt has been made to prepare a set of basic instructions for observers and to standardise the terminology used in reports.

The objectives of this Annex are to instruct non-specialised observers on:

- what to look for;
- how to locate the pollution;
- how to observe, describe and report the pollution;
- how to prepare the information for further processing.

Note: Remote Sensing, monitoring and visualisation of marine spill incidents continues to advance and develop, therefore it is recommended to consult the latest publications or guidelines in this field to determine the current state of the art technology available (Annex 11)

2 ORGANISATION OF AN AERIAL OBSERVATION MISSION

- The aircraft (either helicopter or fixed-wing) chosen for aerial monitoring of oil spills should have good all round visibility.
- Helicopters are more suitable for missions near the shore, while fixed-wing aircraft provide more speed and longer range for missions over the open sea.
- Safety of the crew and observers must always have priority over all other considerations and therefore multi-engined (at least twin) aircraft should be used for all missions over remote sea areas.
- In order to reduce, as much as possible, the time spent searching for pollution, a flight plan should be prepared before the flight.

- Observers should be provided with the charts of the area. For more accurate identification of positions and reporting, it is useful to draw a grid on the chart using e.g. grid squares with the sides of 1 Nautical mile each.
- A "ladder search" (illustrated on the following page) across the direction of the wind is considered to be the most efficient method of surveying the area in which the oil might be found. A systematic search for oil over a large sea area is recommended since forecasting of oil movement is intrinsically not very accurate, and accordingly oil might be found at larger distances or in directions different from those predicted on the basis of calculation.

Movement of oil from A to position B three days later is predicted by combining 100% of the current speed and 3% of the wind speed as shown. The arrows from A represent current, wind and oil movement for one day. A cross-wind ladder search pattern is shown over position B.

Reproduced from "Response to Marine Oil Spills", International Tanker Owners Pollution Federation Ltd., 1987.

- When the visibility is good (in clear weather) a recommended altitude is approximately 500 m, however, in order to obtain better view of the oil, once found, it is necessary to drop to lower altitudes (200 m or less).
- In order to determine the position of oil sightings, the observer should be able to consult aircraft instruments; in particular, when oil is found far from shore and points of reference on the shore.
- In order to enable the undisturbed communication between the observer and the pilot of the aircraft, wearing of headsets is highly recommended.
- Sun glasses (with polarising lenses, if possible) will help detection of oil at sea under certain light conditions.

3 APPEARANCE OF OIL SPILLS

When spilled at sea, oil forms a slick which drifts with the wind and current, and subsequently breaks up into smaller slicks (patches), usually interspersed with the areas of relatively thin sheen, and scatters over areas which, with time, become very large. With a change in wind direction oil already deposited on shores might refloat. After being at sea for some time most crude oils and heavy refined products will form a water-in-oil emulsion (“chocolate mousse”) which increases their volume and viscosity and changes their colour. Oil or emulsion can also become mixed with algae and debris.

Three main groups of oil can be distinguished in accordance with their appearance when floating on the sea surface:

- Light refined products (petrol, gasoil, kerosene) which spread uniformly on big surfaces and undergo strong evaporation and rapid natural dispersion processes, often resulting in their total disappearance in 2 to 3 days. They form thin sheens.
- Heavy refined products (fuel No. 6 and most types of fuel oils used by merchant ships) which are very viscous spread less rapidly and do not disappear naturally. These form dark thicker patches, separated by areas of intermediate and thin sheens. May form emulsions.

- Crude oils whose characteristics and behaviour vary greatly according to their type and origin. Usually these rapidly break into areas of dark, thicker oil interspersed with areas of intermediate and thin sheens. Most crude oils will form emulsions within 24 – 48 hours.
- In general terms, the thick parts of an oil slick have dull (dark) colours, the colour of patches of intermediate thickness is blue or iridescent (rainbow), and the thinnest parts of a slick appear as areas of grey or silvery sheen.

Sheen consists of only small quantities of oil but is the most visible proof of pollution. Frequently, thick patches are discovered in the midst and windward of an area covered by sheen (silver, grey or iridescent).

Thick patches represent big quantities of oil. Generally, black or dark brown at the early stages of pollution, but once emulsified may appear as brown, red, orange or yellow patches.

TABLE 1 gives an indication of relations between the appearance (colour) of an oil slick, approximate thickness of oil and the approximate volume of oil (in cubic metres) the slick contains per unit of surface area (square kilometres).

TABLE 1: APPEARANCE/ THICKNESS/ VOLUME OF OIL ON THE SEA SURFACE.

APPEARANCE/ COLOUR	APPROX. THICKNESS (μm)	APPROX. VOLUME (m^3/km^2)
silvery sheen	0.02-0.05	0
grey sheen	0.1	0.1
iridescent (rainbow) sheen	0.3	0.3
Blue	1.0	1
blue/brown	5.0	5
brown/black	15-25	15-25
dark brown/black	>100	>100
brown/red/orange/yellow mousse	>1 mm	

Reproduced from "Manual on Oil Pollution at Sea: Securing Evidence on Discharges from Ships", Bonn Agreement, 1993.

Note: the volume of oil per square kilometre will depend on the patchiness of the coverage: the figures above assume 100% coverage, which is most unlikely.

4 DESCRIPTION OF POLLUTION

It is recommended to use the same observers throughout the pollution incident, to minimise disparity in reporting. However, if this is not possible, observers should be instructed to use the following terminology when reporting (describing) oil spills:

a) Sheen:

"light sheen" - sea surface covered with faint silvery sheen, barely visible under favourable light conditions;

"sheen"	-	sea surface covered with consistent silvery and grey sheen, no patches of thick oil;
"heavy sheen"	-	sea completely covered with grey sheen, occasionally having rainbow colours (iridescent), no patches of thick oil.

b) Patches:

"small patches"	-	less than 1 m2, hardly visible from higher altitudes, ranging in colour from blue and brown to black;
"medium patches"	-	10-100 m2, clearly visible from the air, colours blue, brown or black.
"big patches"	-	large slicks of 100 m2 and over, clearly visible, colours blue, brown or black.

In order to indicate what percentage of the sea area is covered by oil, the observer should describe the slicks as:

"scattered"	-	if 1 to 2% of the sea is covered;
"not too compact"	-	if up to 5% of the sea is covered;
"compact"	-	if up to 20% of the sea is covered;
"very compact"	-	if over 20% of the sea is covered.

In order to estimate as accurately as possible the percentage area of the sea covered by oil, it is recommended to view vertically down on the sea surface, to time overflying each type of oil (sheen, patch, mousse) at the constant (and recorded) speed of the aircraft, and to calculate the percentages on the basis of these records once the monitoring flight is over.

Big patches should be reported singly. The report should include the colour of the patch and information on (description of) any sheen (iridescence) present around these patches of darker oil. Particular attention should be paid to identifying brownish/red/orange/yellow colours which indicate the presence of chocolate mousse (this is important for the selection of response techniques, since the presence of emulsions may mean that certain types of skimmers or dispersants will be less effective).

If possible, colour or infra-red black and white photographs or slides, or video recording of the slick should complement each report.

5 REMARKS

- Often up to 90% of the oil is concentrated on 10% of the surface covered by a slick, in its downwind end. This phenomenon is more pronounced in cold sea and weather conditions.
- A strong wind, of more than 20 knots, causes formation of separate windrows.
- The absence of iridescence (rainbow colour bands) is almost always an indication of slick weathering and emulsion formation.

- The appearance of a slick can change, depending on the position of the sun in relation to the observer. If there are any doubts, several over flights from different directions should be made in order to verify the initial observation.
- Certain phenomena (shadows of clouds, algae or seaweed under the sea surface, suspended sediments in an estuary) can be mistaken for oil slicks. If there are any doubts, the observer should request additional over flights of the suspicious area.
- During very strong storms (sea 6), even a major pollution can be difficult to notice and it may become visible only once the weather has calmed down (CAUTION: only large multi-engine aircraft could be used for aerial monitoring under such conditions).

6 METEOROLOGICAL CONDITIONS

The influence of meteorological conditions is as decisive for the observation of a spill as it is for its combating. TABLES 2, 3, 4 give standard scales for wind force (Beaufort wind force scale), sea state and nebulosity, respectively, which should be used by observers when reporting meteorological conditions in the surveyed area.

TABLE 2: BEAUFORT WIND FORCE SCALE

DESCRIPTIVE TERM	BEAUFORT NUMBER	LIMITS OF WIND VELOCITY		PROBABLE MEAN HEIGHT OF WAVES *
		in knots	in m/sec	in metres
Calm	0	<1	0-0.2	-
Light air	1	1-3	0.5-1.5	0.1
Light breeze	2	4-6	1.6-3.3	0.2
Gentle breeze	3	7-10	3.4-5.4	0.6
Moderate breeze	4	11-16	5.5-7.9	1.0
Fresh breeze	5	17-21	8-10.7	2.0
Strong breeze	6	22-27	10.8-13.8	3.0
Near gale	7	28-33	13.9-17.1	4.0
Gale	8	34-40	17.2-20.7	5.5
Strong gale	9	41-47	20.8-24.4	7.0
Storm	10	48-55	24.5-28.4	9.0
Violent storm	11	56-63	28.5-32.6	11.5
Hurricane	12	64-+	32.7-+	>14

* This column is only a guide, showing roughly what may be expected in the open sea, far from land.

TABLE 3: SEA STATE

DESCRIPTIVE TERM	SEA STATE	WAVE HEIGHT
Calm (glassy)	0	0
Calm (rippled)	1	0-0.1
Smooth (wavelets)	2	0.1-0.5
Slight	3	0.5-1.25
Moderate	4	1.25-2.5
Rough	5	2.5-4
Very rough	6	4-6
High	7	6-9

Very high	8	9-14
Phenomenal	9	>14

The sea state is completed with SWELL indications:

Height		Length	
Small	0-2 m	Short	0-100 m (Probably different from the wind direction)
Moderate	2-4 m	Medium	100-200 m
High	4 m	Long	200 m

TABLE 4: NEBULOSITY

Part of the sky covered with clouds in oktas from 0 to 8

0: no clouds

8: entirely cloudy

*** * ***

Annexure 6

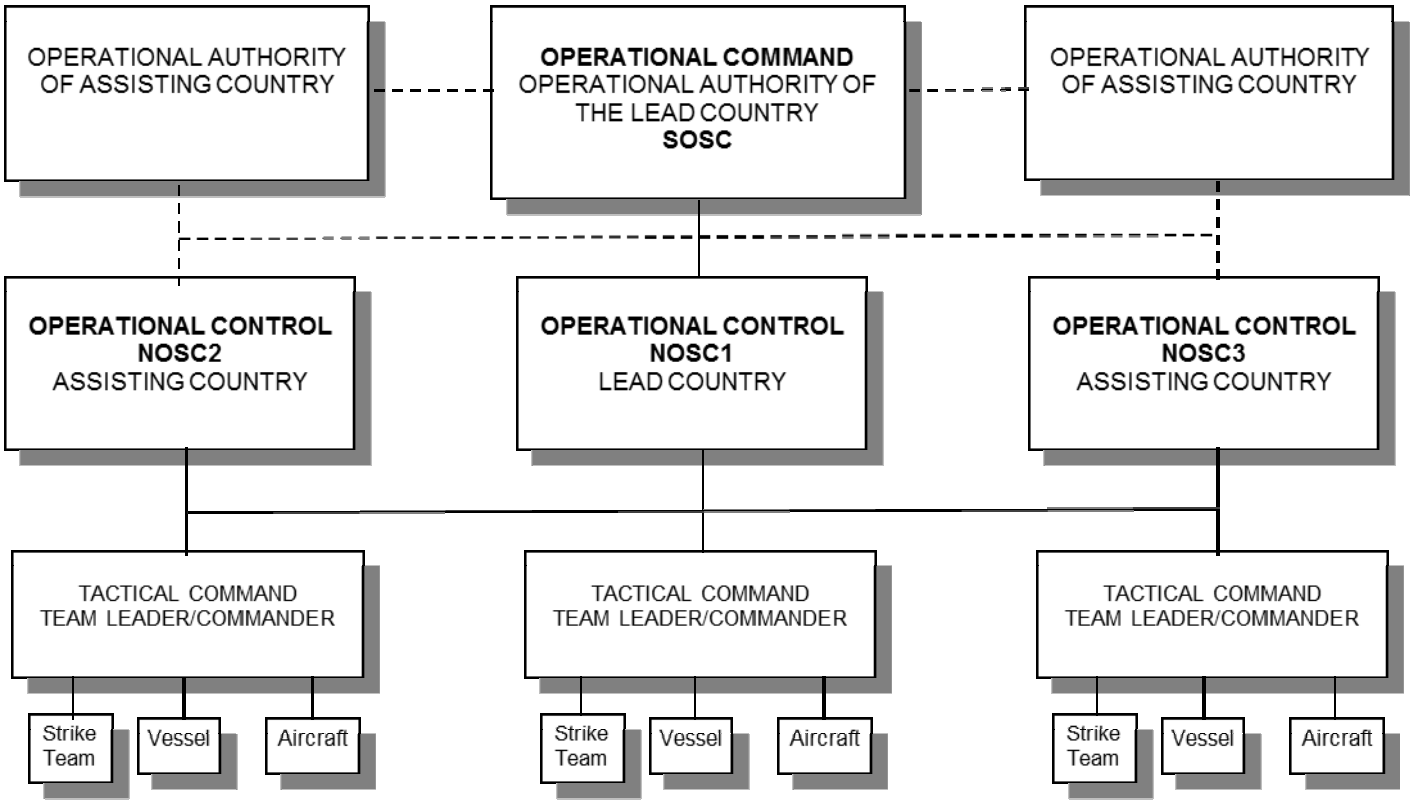
(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

COMMAND STRUCTURE

TEMPLATE

EXAMPLE

Diagram 1 – Command Structure



Operational Command which is overall co-ordination and control of ***Joint Response Operations*** and consists of taking decisions concerning response strategy and defining the tasks of various groups of teams. Following the activation of the Plan, Operational Command over Joint Response Operations is exercised by the Lead Authority through its NOSC who assumes the role of SOSC.

Operational/Advisory Control which is direct control over personnel, means and units taking part in the response operations, including giving orders to specific groups of teams and units for execution of response operations, in accordance with the strategy and the tasks defined by the Operational Command. Operational Control over national resources is exercised by the NOSCs of the respective Parties. (Operational Control over the resources of the Lead State is exercised by an officer designated to act as NOSC in lieu of the officer who has assumed the role of SOSC.)

Tactical Command which consists of directing and supervising the execution of specific tasks by teams or units on the scene. Tactical Command is exercised by the Leader of each team or the Commander of each unit taking part in the response operations.

Liaison between the Lead Authority and the assisting Member State shall be maintained, according to the circumstances and to the type and importance of the assistance rendered, in one of the following ways:

- by direct e-mail, telex, telefax, telephone or radio contacts between the Lead Authority (SOSC) and Operational Authorities (NOSCs) of the assisting Member States or by any other suitable means of communication identified.
- by a Liaison Officer from the assisting Member State who is integrated in the staff of the SOSC. His/her duties shall be to provide necessary information on resources rendered as assistance and to facilitate communication with his/her NOSC, ERC, Strike Teams and self-contained units taking part in the operations;
- by NOSC of the assisting Member State who personally attends at the spill site and participates in Joint Response Operations.

Annexure 7

(To Regional Oil And Chemical Pollution Contingency Plan For South Asia)

RESOURCES WHICH MIGHT BE MADE AVAILABLE FROM OUTSIDE THE REGION INCLUDING CONTACT POINTS /OIL INDUSTRY INTERNATIONAL TIER 2/3 RESPONSE CENTRES

INDUSTRY STOCKPILES

These centres have been established and are funded by groups of oil companies. In the "3 Tier" concept of oil spill response, Tier 3 arrangements provide for a combined national or international response to a major oil spill. The international centres have been established to avoid duplication of expensive resources which may only be required infrequently. They are consistent with the OPRC Convention which recognises the importance of cooperation between public and private bodies in providing expertise and resources for responding to oil spills.

Although member companies have preferential access, the centres are available to third party users such as governments and tanker owners. There is a charge for their use, except for the PAJ stockpile. The daily rental rates are published by the centres. The PAJ stockpiles are free, but users must repair or replace damaged equipment.

The main centres which could respond in the South Asia Region are:

Oil Spill Response Ltd (OSRL)	Singapore
Oil Spill Response Ltd (OSRL),	Southampton, UK
Petroleum Association of Japan, *(to be confirmed)*	Ras Al Khafji, Saudi Arabia; Abu Dhabi; Malaysia; Singapore; Jakarta, Indonesia and 6 bases in Japan]
Australian Marine Oil Spill Centre, (AMOSC)	Geelong, Australia

OSRL

OSRL is an Industry funded "Global Alliance" with response bases in Singapore, Bahrain in the Arabian Gulf, Southampton in the UK and Fort Lauderdale in the USA. They also have call off arrangements with majority number of other response organisations whereby they can pool their resources and expertise. In effect a request to either one of their bases may make available the resources of all. Both have comprehensive stockpiles ready for rapid transport by air, but would rely on local transport to the scene.

The effective use of outside resources, such as those of the Tier 3 centres, will depend very much on the planning, organisation, facilitation and command provided by the Lead Country. OSRL may have sufficient manpower to operate its equipment at the scene of an oil spill but, in a major spill, they would need to be supplemented by outside personnel.

AMOSC (Australian Marine Oil Spill Centre)

Formally, AMOSC's area of operation is bounded by 110 deg E, 0 deg S, 145 deg W, 50 deg S. This therefore excludes the South Asia region countries.

However, if it were a very serious spill, their resources may either be sourced through the Industry Global Alliance or through an Asian country to country support initiative through AMSA (Australian Maritime Safety Authority). (AMOSC has a standing contract with AMSA.) AMSA has a number of MOUs with neighbouring countries. Although none of these are in South Asia it might be worth approaching AMSA if there were a serious spill and further resources were still needed in addition to those made available from sources closer to hand.

For completeness, all the Asian resources are shown below with their location and contact details :**Global Bases Providing Tier 2/ 3 Capability**

Name of Centre	Location/ Area of Operation	Comment	Direct Focal Point
Australian Marine Oil Spill Centre (AMOSC)	Territorial Australia with the ability to operate in the South West Pacific.		Nick Quinn General Manager Australian Marine Oil Spill Centre PO Box 1497 Geelong, Victoria, 3220 Telephone: (03) 5272 1555 Fax: (03) 5272 1839 Email: amosc@amosc.com.au
China Offshore Environmental Services Ltd (COES)	China		Address: TianJin TangGu BohaiShiYou Road 688, China, BoHaiShiYou Building B zone A801 room. Mail Code: 300452 Contact People: Feng Quan, Deputy Manager of OSR Dept. Mobile: +86 13752395456 Office Phone: 022-25808079 Website: http://www.coes.org.cn Email: fengquan@coes.org.cn
Hong Kong Response Ltd	Hong Kong	Spill response consortium funded by 4 oil companies, Sinopec, ExxonMobil, Chevron, and Shell	Hong Kong Response Limited Contact Person: Mr. MING Chuen-hoi, & Mr. LEUNG Wai-lun Contact e-mail: GM@hkrl.com.hk tel: (852) 2434 3338 Fax : (852) 2434 0444 Company Address: ESSO Tsing Yi Terminal Lot. 46, Tsing Yi Road, Tsing Yi Island, New Territories, Hong Kong
Industry Environmental Safety Group (IESG)	Main stockpiles in Chonburi and Songkhla (sub-stockpiles in Bangkok and Rayong), Thailand	Reached 20 member companies in 2012.	Teerapol Phaparkhom IESG Chairman Email:Teerapol.p@pttar.com Office: 8, 1-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Muang District, Rayong, 21150 Thailand Tel: (66) 2239 7955 56 Fax: (66)2-239-7917 Website: www.iesg.or.th

Korea Marine Environment Management Corporation(KOEM)	**Korea**	**Formerly KMPRC**	**Woo-Rack SUH General manager, Response Dept. Korea Marine Environment Management Corporation(KOEM) www.koem.or.kr suhwoorack@naver.com tel +82 (0)2 3498 8593 fax +82 (0)2 3462 7707 mp +82 (0)10 3100 6756**
OSRL	**Spill response bases in United Kingdom, Singapore, Bahrain and Florida. Also has anumber of bases for capping stacks (see separate section)**	**Reponse bases for capping stacks identified separately**	**Paul Foley, Technical Manager, Oil Spill Response ltd. Lower William Street, Southampton, Hants. SO14 5QE. UNITED KINGDOM. Tel: +44 (0) 2380 331551 Fax: +44 (0) 2380 331972 email: paulfoley@oilspillresponse.com web: http://www.oilspillresponse.com**
Petroleum Association of Japan (PAJ) Oil Spill Co-operative	**Asia Pacific and Middle East**	**Six domestic bases in Japan and five overseas bases (Singapore, Saudi Arabia, Malaysia, UAE, Indonesia**	**http://www.pcs.gr.jp/default_e.html**
Petroleum Industry of Malaysia Mutual Aid Group (PIMMAG)	**Malaysia (including EEZ)**	**PIMMAG operates and maintains seven OSR equipment stockpiles in Malaysia. Three of these stockpiles are in manned bases at Kemaman, Port Dickson and Labuan. The unmanned stockpiles are at Kuching, Miri, Kertih and Tawau**	**Capt. Amir Murad Al-Haj, General Manager, PIMMAG, Level 5, Menara Dayabumi Kompleks Dayabumi, Jalan Sultan Hishamuddin 50050 Kuala Lumpur, Malaysia TEL: 603-2783 6993/6997, FAX: 603-2783 6992, H/P: 019 3500 197, E-mail: amir@petronas.com.my; amir@pimmag.com.my**
Singapore Oil Spill Response Centre (SOSRC)	**Singapore and Malaysian waters**		**Fabian Tao ER Divisions POSH Semco Pte Ltd DID: (65) 6839 6515 Fax: (65) 6839 6702 Mobile: (65) 9230 6160 fabianteo@paccoffshore.com.sg**

Swire Emergency Response Services (SERS)	**Dubai**		**Fergus Perry, Operations Manager fergus.perry@swire-ers.com**
	Douala		
	Singapore (Swire Pacific)		

Other Sources of Equipment and assistance e.g. Governmental

Marine Emergency Mutual Aid Centre (MEMAC)) in Bahrain Captain Abdul Munem Al-Janahi
memac@batelco.com.bh
(973) 39622744
: http://www.memac-rsa.org/

Annexure 8

(To Regional Oil and Chemical Pollution Contingency Plan for South Asia)

REQUESTING ASSISTANCE
POLREP POLLUTION REPORTING SYSTEM

INTRODUCTION

In order to retain the consistency with the POLREP Pollution Reporting System, which has been agreed for use in accordance with the recommendation of IMO, the format for requesting assistance within the framework of the present Regional Contingency Plan has been based on Part III-POLFAC (Pollution Facilities) of POLREP, aimed at "requesting assistance from Parties and for defining operational matters related to assistance".

Lines 80 to 87 of the original POLFAC message should be completed in accordance with general instructions given while specific questions reflecting the requirements of the Regional Contingency Plan for South Asia should be entered in lines 88 to 98 of the standard POLFAC message.

Description of the complete POLFAC message, which should be used as the standard format for requesting assistance within the framework of the present Regional Contingency Plan is given below:

It might be recalled that the request for assistance can be transmitted either separately or together with the other parts (POLWARN, POLINF) of the PLOREP message.

When answering a request for assistance, the Parties do not have to adhere to the POLREP format, although it would be desirable that the figures using POLFAC message are also used in response message, for easier reference.

Requesting Assistance - Taken from the standard POLREP format Part III (POLFAC)

	CONTENTS	REMARKS
80	DATE AND TIME	No. 80 is related to the situation described below
81	REQUEST FOR ASSISTANCE	Type and amount of assistance required in the form of: - specified equipment - specified equipment with trained personnel - complete strike teams - personnel with special expertise with indication of country requested.
82	COST	Requirements for cost information to requesting country of delivered assistance.
83	PRE-ARRANGEMENTS FOR THE DELIVERY OF ASSISTANCE	Information concerning customs clearance, access to territorial waters, etc. in the requesting country.

	CONTENTS	REMARKS
84	TO WHERE ASSISTANCE SHOULD BE RENDERED AND HOW	Information concerning the delivery of the assistance, e.g. rendezvous at sea with information on frequencies to be used, call sign and name of supreme on-scene commander of the requesting country, or land-based authorities with telephone number, telex number and contact persons.
85	NAMES OF OTHER STATES AND ORGANIZATIONS	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 substantial part of an oil pollution or serious threat of 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 country taking over the command.
88-98		SPARE FOR ANY OTHER RELEVANT REQUIREMENTS OR INSTRUCTIONS
99	ACKNOWLEDGE	When this figure is used the telex should be acknowledged as soon as possible by the competent national authority.

POLREP POLLUTION REPORTING SYSTEM

Summarized list of POLREP

	Address	From
	Date Time Group	to
	Identification	
	Serial number	
	1	Date and time
PART I	2	Position
(POLWARN)	3	Incident
	4	Out flow
	5	Acknowledge
	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
PART II	46	Sea state and visibility
(POLINF)	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
	53-59	Spare
	60	Acknowledge
	80	Date and time
	81	Request for assistance
	82	Cost
PART 111	83	Pre-arrangements for the delivery
(POLFAC)	84	Assistance to where and how
	85	Other States requested
	86	Change of command
	87	Exchange of information
	88-98	Spare
	99	Acknowledge

Table 1

CONTENTS	**REMARKS**
DTG (Day Time Group)	Day and time for drafting of the telex (DTG). Always 6 figures. Can be followed by month indication. The DTG can be used as a reference.
POLREP Regional Oil and Chemical Spill Contingency Plan for South Asia	This is the identification report. "POL…" indicates that this is a report on a pollution incident "…REP". indicates that the report might deal with all aspects of pollution (such as oil as well as other harmful substances). It can contain up to 3 main parts: Part I (POLWARN) Is an initial notice (a first information or a warning) of a casualty or the presence of oil slicks or harmful substances. This part of the report is numbered from 1 to 5. Part II (POLINF) Is a detailed supplementary report to part I. This part of the report is numbered from 40 to 60. Part III (POLFAC) Is for requests for assistance from other Contracting Parties, as well as for operational matters in the assistance situation. This part of the report is numbered from 80 to 99. See **Annex 6** ROCSCPSA It may be helpful to have a word to identify the particular plan referred to. Parts I, II and III can be transmitted all together in one report or separately. Furthermore, single figures from each part can be transmitted separately or combined with figures from the two other parts. Figures without additional text shall not appear in the POLREP. When part I is used as a warning of a serious threat, the telex should be headed with the traffic priority word "URGENT". ALL POLREPS containing ACKNOWLEDGE figures (5, 60 or 99) should be acknowledged as soon as possible by the competent national authority. POLREPS shall always be terminated by a telex from the reporting State, which indicates that no more operational communication on that particular incident can be expected.

CONTENTS	REMARKS
B 1/1	Each single report should be possible to identify and the receiving agency should be in a position to check whether all reports of the incident in question have been received. This is done by using a nation-identifier (B, IN, P, M, SL) 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. POLREP SACEP B 1/1 this indicates the first report from Bangladesh of the incident in question in the South Asia region. POLREP SACEP B 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 into clearly defined patches - in this example two - the wording POLREP SACEP 1 now splitting into POLREP SACEP 2 and POLREP SACEP 3 should be included in the last report on the incident which is identified by figure 1 preceeding the stroke i.e. SACEP 1/... The first reports on the two patches originating from the incident first reported will then be numbered POLREP SACEP B2/1 and POLREP SACEP B3/1 and consecutive numbers after the stroke could then be used.

PART I (POLWARN)

CONTENTS		REMARKS
1	DATE AND TIME	The date 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 as [GMT/UTC ?] for example 091900[z] (i.e. the 9th of the relevant month at 1900 [GMT]).
2	POSITION	Indicates the main position of the incident in latitude and longitude in degrees and minutes and may, in addition, give the bearing of and the distance from a location known by the receiver.
3	INCIDENT	The nature of the incident should be stated here, such as 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 and/or the flow rate, as well as the risk of further outflow. If there is no pollution but a pollution threat, the words NOT YET followed by the substance, for example NOT YET FUEL OIL, should be stated.

CONTENTS		REMARKS
5	ACKNOWLEDGE	When this figure is used the telex should be acknowledged as soon as possible by the competent national authority.

PART II (POLINF)

CONTENTS		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	Indicates the main position of the pollution in latitude and longitude in degrees and minutes and may in addition give the distance and bearing of some prominent landmark 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 if other than indicated in figure 4, or number of containers, drums, etc. lost). Indicates length and width of slick given in 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 United Nations 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 a 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 AND/OR TIDE	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 VIABILITY	Sea state indicated as wave height in metres. 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/s.

48	FORECAST OF LIKELY EFFECT OF POLLUTION AND ZONE AFFECTED	e.g. arrival on beach with estimated timing. Results of mathematical models.
49	IDENTITY OF OBSERVER/REPORTER IDENTITY OF SHIPS ON SCENE	Indicates who has reported the incident. If a ship, name, home port, flag and call sign must be given. Ships on scene can also be indicated under this item by name, home port, flat and call sign, especially if the polluter cannot be identified and the spill is considered to be of recent origin.
50	ACTION PLAN	Any action taken for the disposal of the pollution.
51	PHOTOGRAPHS OR SAMPLES	Indicates if photographs or samples from the pollution have been taken. Telex number of the sampling authority should be given.
52	NAMES OF OTHER STATES AND ORGANIZATIONS INFORMED	
53-59		SPARE FOR ANY OTHER RELEVANT INFORMATION (e.g. results of sample or photographic analysis, results of inspections of surveyors, statements of ship`s personnel, etc.
60	ACKNOWLEDGE	When this figure is used the telex should be acknowledged as soon as possible by the competent national authority.

PART III (POLFAC)
(See Annex 6 – Standard Format for Requesting Assistance)

TABLE 2
POLREP
Example No. 1
Full report (parts I, II &III)

Address		From:	DK
		To:	FRG and NL
Date Time Group		181100z june	
Identification		POLREP BONN AGREEMENT	
Serial number		DK1/2 (DK 1/1 for FRG)	
1	Date and Time	1	181000Z
2	Position	2	55° 30`N-07°00`E
3	Incident	3	Tanker collision
4	Outflow	4	Crude oil, estimated 3,000 tonnes
41	Position and/or extent of pollution	41	The oil is forming a slick 0.5 nautical

	on/above/in the sea		miles to the south-east. Width up to 0.3 nautical miles.
42	Characteristics of pollution	42	Venezuela crude. Viscosity 3,780 Cs at 37.8°C. Rather viscous.
43	Source and cause of pollution	43	Danish tanker ESSO BALTICA of Copenhagen, 22,000 GRT, call sign xxx in collision with Norwegian bulk carrier AGNEDAL of Stavanger, 30,000 GRT, call sign yyy. Two tanks damaged in ESSO BALTICA. No damage in AGNEDAL.
44	Wind direction and speed	44	270-10 m/s.
45	Current direction and speed and/or tide	45	180-0.3 knots.
46	Sea state and visibility	46	Wave height 2m. 10 nautical miles.
47	Drift of pollution	47	135-0.4 knots.
48	Forecast of likely effect of pollution and zones affected	48	Could reach the island of Sylt, FRG or further south, NL on 23rd of this month.
49	Identify of observer /reporter. Identity of ships on scene	49	AGNEDAL, figure 43 refers.
50	Action taken	50	2 Danish strike teams high mechanical capacity on route to the area.
51	Photographs or samples	51	Oil samples have been taken. Telex 64 471 SOK DK.
52	Names of other States and organizations informed	52	FRG
53	Spare	53	DENGER PLAN is activated.
81	Request for assistance	81	FRG is requested for 2 strike terms with high mechanical pick-up capacity.
82	Cost	82	FRG is requested for an approximate cost rate per day of assistance rendered.
83	Pre-arrangements for the delivery of assistance	83	FRG units will be allowed to enter Danish territorial waters for combating purposes or Danish harbours for logistics informing SOSC beforehand.
84	To where assistance should be rendered and how	84	Rendezvous 57°30`N-07°00`E Report on VHF channels 16 and 67. SOSC, Lieutenant Commander Hansen in GUNNAR SEIDENFADEN, call sign OWAJ.
99	ACKNOWLEDGE	99	ACKNOWLEDGE

Annexure 9

RESOLUTION A.869 (20)
ADOPTED ON 27 NOVEMBER 1997

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to guidelines concerning the prevention and control of marine pollution from ships,

RECALLING ALSO resolution A.625 (15) concerning the arrangements for the entry and clearance of marine pollution response resources during emergency situations,

BEING AWARE that the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention), 1990, and in particular Article 7 thereof, stipulates, *inter alia*, that each Party to the OPRC Convention shall take the necessary legal or administrative measures to facilitate: the arrival and utilization in and departure from its territory of ships, aircraft and other modes of transport engaged in responding to an oil pollution incident or transporting personnel, cargoes, materials and equipment required to deal with such an incident; and the expeditious movement into, through, and out of its territory of such personnel, cargoes, materials and equipment,

BEING AWARE ALSO that the Annex to the OPRC Convention makes provision for the reimbursement of costs of assistance,

BEING AWARE FURTHER that experience in responding to a major oil pollution incident requiring resources outside a country has clearly demonstrated the critical importance of administrative procedures to facilitate rapid provision of assistance and deployment of human resources and equipment,

NOTING the decisions and recommendations made by the Marine Environment Protection Committee at its thirty-eighth session,

1 ADOPTS the Guidelines for Facilitation of Response to an Oil Pollution Incident set out in the Annex to the present resolution;

2 URGES Contracting Parties to the above-mentioned OPRC Convention to implement the Guidelines;

3 URGES ALSO all Member Governments to implement the Guidelines;

4 REQUESTS the Marine Environment Protection Committee to keep the Guidelines under review taking into account experience gained in their use.

GUIDELINES FOR FACILITATION OF RESPONSE TO AN OIL POLLUTION INCIDENT PURSUANT TO ARTICLE 7 AND ANNEX OF THE INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND CO-OPERATION, 1990

1 If a State needs assistance in the event of an oil pollution incident, it may ask for assistance from other States, indicating the scope and type of assistance required. A State to which a request for assistance is directed should promptly decide and inform the requesting State whether it is in a position to render the assistance required and indicate the scope and terms of the assistance that might be rendered.

2 The States concerned should co-operate to facilitate the prompt provision of assistance agreed to under paragraph 1 of these Guidelines, including, where appropriate, action to minimize the consequences and effects of the oil pollution incident, and to provide general assistance. Where States do not have bilateral or multilateral agreements which cover their arrangements for providing mutual assistance, the assistance should be rendered in accordance with the following provisions, unless the States agree otherwise.

3 The requesting State is responsible for overall supervision, control and co-ordination of the response to the incident and of the assistance supplied. Personnel sent by the assisting State are normally in charge of the immediate operational supervision of its personnel and equipment. The personnel involved in the assisting operation should act in accordance with the relevant laws of the requesting State, which should endeavour to inform the assisting State of the relevant laws. The appropriate authorities of the requesting State shall co-operate with the authority designated by the assisting State**.**

4 The requesting State should, to the extent of its capabilities, provide local facilities and services for the proper and effective administration of the assistance, including decontamination activities, and **should** ensure the protection and return of personnel, equipment and materials brought into its territory by, or on behalf of, the assisting State for such a purpose.

5 The requesting State **should** use its best efforts to afford to the assisting State and persons acting on its behalf the privileges, immunities or facilities necessary for the expeditious performance of their assistance function. The requesting State **should** not be required to apply this provision to its own nationals or permanent residents or to afford them the privileges and immunities referred to above.

6 A State **should**, at the request of the requesting or assisting State, endeavour to facilitate the transit through its territory of duly notified personnel, equipment and property involved in the assistance to and from the requesting State.

7 The requesting State **should** facilitate the entry into, stay in and departure from its national territory of duly notified personnel and of equipment and property involved in the assistance.

8 With regard to actions resulting directly from the assistance provided, the requesting State should reimburse the assisting State for the loss or any damage to equipment or other property belonging to the assisting State. The requesting State should also reimburse the assisting State for expenses involved in such assistance arising from the death of, or injury to, persons, or the loss or damage to property, incurred by personnel acting on behalf of the

assisting State. This would not prevent the requesting State from seeking reimbursement as part of its claim under the appropriate compensation convention.

9 The States concerned should co-operate closely in order to facilitate the settlement of legal proceedings and claims which could result from assistance operations.

10 The affected or requesting State may at any time, after appropriate consultations and by notification, request the termination of assistance received or provided under this Convention. Once such a request has been made, the States concerned should **consult one another with a view to making arrangements for the proper termination for the assistance.**

11 As the assistance should not be delayed for administrative or other reasons, the necessary legislation should be adopted during the preparedness phase, i.e. before the incident which would require assistance. This is particularly relevant to paragraphs 4 to 8 above.

12 Similar facilitation should be implemented by States concerned when personnel or equipment are provided on behalf of a ship owner, a cargo owner or other relevant entities.

13 In some oil pollution incidents, a ship owner, cargo owner or other private entity may be best placed to call upon dedicated equipment, materials and trained operators to assist with the clean-up response. In order to benefit from the availability of such resources and to ensure their rapid deployment, the State requesting or being offered assistance should facilitate the entry, clearance and subsequent return of the persons, materials and equipment provided. Public authorities should, in so far as it is possible, waive customs and excise duties and other taxes on any equipment and materials provided on a temporary basis for the purpose of assisting in the response to an oil pollution incident.

* * *

Annexure 10

References

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