



**Proceedings of  
the IMO/APCEL/MPA  
Workshop on  
the Ratification and  
Implementation of  
MARPOL 73/78  
in the East Asian Seas**

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20 October - 1 November 1996  
Singapore

PROCEEDINGS OF THE IMO/APCEL/MPA WORKSHOP ON THE  
RATIFICATION AND IMPLEMENTATION OF MARPOL 73/78  
IN THE EAST ASIAN SEAS

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**IMO/APCEL/MPA WORKSHOP ON THE  
RATIFICATION AND IMPLEMENTATION OF MARPOL 73/78**

**Faculty of Law, National University of Singapore**

**Singapore**

**30 October to 1 November 1996**

*WORKSHOP REPORT*

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**INTRODUCTION**

- 1.0 The IMO/APCEL/MPA Workshop on the Ratification and Implementation of MARPOL 73/78 was held at the Faculty of Law, National University of Singapore from 30 October to 1 November 1996. The workshop was co-sponsored by the International Maritime Organization (IMO), the Asia-Pacific Center for Environmental Law (APCEL) and the Maritime and Port Authority (MPA) of Singapore. Financial support for the workshop was provided by the Government of Norway. Participants from Cambodia, Indonesia, Philippines and Vietnam attended. The workshop was co-chaired by Mr. Robert Beckman, APCEL and Mr. Adrian Ross, IMO.
- 2.0 A full list of participants and resource persons is appended in Annex 2.
- 3.0 The agenda for the workshop is appended in Annex 3.

**Session 1: Opening Session**

- 4.0 The Opening Session of the workshop was chaired by Associate Professor Robert Beckman, Faculty of Law, National University of Singapore (NUS). Mr. Beckman welcomed all participants to Singapore and NUS on the occasion of the workshop and expressed his desire that their stay in Singapore would be a rewarding and enjoyable experience. Mr. Beckman introduced Mr. Henning Braathaug of the International Maritime Organization.

- 5.0 The IMO Headquarters' representative, Mr. Brathaug, expressed appreciation to NUS and MPA for their co-operation and support in organizing and implementing the workshop. He also welcomed the representatives from the four participating countries who were attending the workshop. Mr. Brathaug briefly explained that IMO's original mission was to save man from the ocean, now its concentration was shifting towards saving the ocean from man. He emphasized MARPOL's positive effect on the marine environment, saying that while the Convention could be costly to implement, not implementing it had proven even costlier because of the serious socio-economic effects of pollution. He outlined the many actions that IMO has taken to promote the ratification of MARPOL. Lastly, he wished everyone every success for the workshop.
- 6.0 Mr. Beckman then presented Professor Koh Kheng Lian, Director, Asia-Pacific Centre for Environmental Law. Professor Koh explained that the Workshop represented a part of APCEL's efforts to build capacity in the Asia-Pacific region to deal with the ever-increasing international environmental law instruments. She expressed her appreciation for the opportunity to collaborate with the International Maritime Organization (IMO) and the Maritime and Port Authority of Singapore (MPA), and for the resource persons from IMO, MPA and APCEL, who are experts in the field. Finally, she thanked IMO and MPA for their generous sponsorship.
- 7.0 Mr. Zafrul Alam, 2 Assistant Director (International), Policy Division, Maritime and Port Authority of Singapore, was introduced to the group. Mr. Alam informed the group of MPA's history, coming into existence in February 1996 through a merging of the National Maritime Board, the Marine Department and the regulatory departments of the Port of Singapore Authority (PSA). MPA's mission is to protect Singapore's strategic maritime interests and promote it as a major port and international maritime center which, as Mr. Alam indicated, is very important considering that Singapore is the busiest port, the second busiest container port, a leading ship repair center, oil refining center, cruise center and a leading bunkering center in the world. Singapore also has the 11th largest fleet in the world. Mr. Alam thanked IMO and APCEL for inviting MPA to co-organize the Workshop. He said that Singapore is glad to share its experiences on the ratification and implementation of MARPOL. Singapore started the groundwork in 1980 and deposited its instrument of accession in 1990. While acknowledging the differences between Singapore and the four participating countries, he expressed the belief that Singapore's

experience would be more reasonable and practical for the four countries than that of developed countries. He looked forward to sharing this experience during the next three days, and to the forging of a common purpose for the protection of the marine environment among participants at the workshop.

- 8.0 Mr. Beckman presented the Regional Programme Manager, GEF/UNDP/IMO Regional Programme on Prevention and Management of Marine Pollution in East Asian Seas, Dr. Chua Thia-Eng. Dr. Chua said that the workshop was an important first step toward the ratification and implementation of MARPOL in the region. He stated that ratification is the easy part, and implementation more difficult. Despite the different stages at which they are, vis-a-vis MARPOL, the four participating countries each have to take additional steps to make full implementation a reality. To him, there is nothing better than neighbours sharing experiences and learning from each other. Finally, Dr. Chua expressed his appreciation for everyone's participation, including Singapore's NUS, APCEL and MPA, and for the sponsorship of the project by the Government of Norway.

## WORKSHOP OUTLINE

- 9.0 Mr. Adrian Ross, IMO Programme Office, Manila, reviewed the background and the role of the workshop in assisting countries to ratify and strengthen the implementation of MARPOL. The workshop participants were reminded of the goals of the twelve-month technical co-operation and assistance initiative that was being funded by Norway, namely:
- 9.1 To identify the current problems and impediments in each of the four participating countries with respect to ratification and implementation of MARPOL;
  - 9.2 To establish the current status of MARPOL implementation and enforcement in each country, within the context of national marine pollution programs;
  - 9.3 To develop and initiate actions which will assist participating countries to identify and overcome problems and impediments to the ratification and enhanced implementation of MARPOL; and

- 9.4 To mobilize agencies, institutions and organizations in the public and private sectors, nationally and internationally, to support MARPOL implementation.

The participants were reminded that the evolution of a country's capacity to implement MARPOL was not just a short-term project, but requires a continuous commitment through a series of transitional stages. The stages that a country must go through were described as: preparatory; mobilization; improvement and development. Each country at the workshop was at a different stage in the evolutionary process, and it was important to identify that stage and the major problems being addressed in the advancement of MARPOL initiatives.

10. Mr. Ross then outlined the specific objective and format of the workshop. The specific objective was:

*To develop individual work plans which can be employed by the four participating countries in the short-term to strengthen instruments, infrastructures and capacities for ratifying and implementing MARPOL 73/78.*

11. He pointed out that the workshop would consist of a series of technical sessions conducted by resource persons, followed by two working group deliberations, one on port reception facilities, and another on implementation of MARPOL. The goal of the working group exercises was to identify key issues or problem areas that each country was experiencing with the development of shore reception facilities and the implementation of MARPOL, and the early steps or actions for overcoming those constraints.

### **Ratification and Implementation of MARPOL: Key Considerations and Obligations**

12. Mr. Brathaug presented a brief description of IMO and its committee structure. The history of IMO, its organization and mandate with respect to shipping, navigational safety and marine pollution prevention and management. He stated that UNCED's Agenda 21, among other issues, focused the world's attention on the urgent need to rethink and apply new approaches to protect the global ocean and to develop coastal areas in a sustainable manner. He pointed out that IMO was working with national and international partners to achieve the objectives of Agenda 21. IMO was also committed to assisting countries with the ratification and implementation of international conventions on marine

pollution prevention and management, as an important means of accomplishing this end. He then outlined the major elements of the MARPOL Convention and the technical elements of the MARPOL Annexes, describing:

- (i) crude oil washing, inert gas system and the load-on-top process employed in tankers (Annex I);
- (ii) the four categories of noxious liquid substances in Annex II, ranging from highly toxic (Category A) to non-toxic (Category D);
- (iii) Annex III on harmful substances in packaged form;
- (iv) Annex IV on sewage which is not in effect; and
- (v) the handling and discharge specifications on ship-generated garbage in Annex V.

Mr. Brathaug pointed out that offshore oil production platforms were also included in MARPOL, but only for operational wastes, not production wastes. He explained that operational wastes included oil and garbage which were generated as a result of crew activities on the platform, while production wastes included the chemicals and by-products that were generated as a consequence of the actual drilling and production activities.

## **Session 2: National Profiles on Marine Pollution Prevention and Management**

13. Participants from each of the participating countries provided comments and updated materials on the draft National Profiles that had been prepared by IMO.
14. Captain Lumentah outlined the current situation in Indonesia (Annex 4), explaining that the size of the country, the fact that it consisted of more than 17,000 islands and an extensive coastline, presented some special difficulties with respect to monitoring and enforcement of marine pollution regulations. He outlined the roles and responsibilities for marine pollution programs, with the State Ministry of the Environment, the Directorate General of Sea Communications and BAPEDAL being the key agencies. Captain Lumentah informed the workshop that Indonesia, with the support of World Bank, had recently completed a Port Environmental Improvement Study and Master Plan. The Master Plan included proposals for integrating MARPOL requirements into the environmental systems of Indonesian ports. He further commented on training activities on Port State control which had been undertaken with the assistance from IMO, Japan and the U.S. In conclusion, Captain Lumentah informed the workshop that a Presidential Decree



had recently been enacted in Indonesia, which committed the country to implement the Tokyo Memorandum of Understanding on Port State Control.

15. Mr. Thuong presented Vietnam's national profile (Annex 5), highlighting that there were four national agencies involved in marine pollution programs in his country, namely: the Ministry of Science, Technology and Environment (MOSTE); the Vietnam National Maritime Bureau; the Vietnam Register of Shipping; and the Vietnam Maritime University. There are 3 major cities, 50 provinces and 19 Harbour Masters in Vietnam. The environmental technology departments of the provincial governments report to the MOSTE. He informed the workshop that although Vietnam had ratified MARPOL in 1991, very little progress had been made with regard to implementation. To date there was no implementing legislation. Some key marine pollution issues were identified by Mr. Thuong, including: the development of a national oil spill control center; training in oil spill preparation and response; development of national marine pollution control legislation; organization and administration of marine pollution control among national agencies and different levels of government; monitoring and reporting system of marine pollution; and preparation of a national contingency plan for oil spill response and co-ordination.
16. Mr. Thuong reported that there were 15 accidents involving ships and subsequent oil spills in Vietnam's coastal waters in 1995. Mr Thuong explained that Vietnam had a Maritime Code (1990) with general provisions concerning pollution from ships, and an Environmental Protection Law (1994) which covers general provisions of MARPOL 73/78 and UNCLOS 1982.
17. Mr. dela Cuesta and Mr. Arrieta identified the need to expand the Philippines' national profile to include information on marine pollution activities (Annex 6). It was explained that there were many laws in the Philippines covering marine pollution, but that enforcement was limited, and there were overlapping responsibilities among agencies and levels of government, and limited co-ordination and co-operation. There are three reception facilities in the country belonging to multi-national petroleum companies. Presently, there are 21 major ports operating in the Philippines, and more than 400 ports altogether. A recently completed World Bank study has provided plans for provision of reception facilities at 8 major ports, including the Port of Manila, and Cebu. The Philippine Coast Guard is the lead agency in the Philippines' effort to ratify MARPOL. Devolution of responsibility for environmental issues from

central government to local government has been adopted as a national policy within the Philippines. However, local government capacity to fully address environmental issues requires technical and institutional strengthening.

18. Mr. Sam explained the problems of implementing MARPOL in Cambodia, in the absence of implementing regulations and human resource capacity (Annex 7). He stated that the Ministry of the Environment is a relatively new agency and that there is limited understanding of MARPOL within the Ministry. Other government departments, including the Ministry of Public Works, Ministry of Industry, Port Authorities and Provincial Environment Departments (3 of 21 provinces in Cambodia are in the coastal area) have responsibilities in marine pollution control, but there are no existing regulations. Oil and gas companies are responsible for managing production residues to ensure protection of the environment. Local governments are supportive of environmental programs and are responsible for the disposal and recycling of municipal waste. The pending Environmental Act will give the officers of the Ministry of Environment the right of inspection. Hazardous waste generation and disposal is not a high priority problem in Cambodia at this stage since 45% of the industry in the country are cottage industry.
19. In summarizing the status of the draft national profiles, each of the participating countries concluded that the draft profiles need to be updated and existing material need to be confirmed with other government agencies and the private sector. Mr. Ross suggested that the Manual for the Preparation of National Profiles (hand-out) be employed as a guide in finalizing the profiles. ***Each participating country agreed to prepare a final National Profile, and to contact the IMO Programme office by 15 November 1996 concerning the proposed schedule and required technical and financial resources.***

### Session 3: Planning Reception Facilities

20. Mr. Brathaug reviewed MARPOL requirements concerning shore reception facilities for ship-generated oily wastes (Annex I), waste noxious liquid substances (Annex II), sewage (Annex IV) and garbage (Annex V). Typical garbage generation rates on board vessels were described as follows:

<b>Vessel Type</b>	<b>Unit generation rate</b>
	(kg/cap/day)
Passenger vessel	> 2.5
Cargo vessel	1 to 2
<b>Waste Type</b>	
Dry waste	0.3 to 0.5
Food	0.2 to 0.5
Glass/tins	0.7 to 1.5

For a cruise ship carrying 3,000 persons, Mr. Brathaug estimated that more than 7,200 kg of garbage are generated on a daily basis, including 3,000 kg of combustible waste (75 m<sup>3</sup>/day), 3,000 kg of glass and tins (10 m<sup>3</sup>/day) and 1,200 kg of wet/food waste (5 m<sup>3</sup>/day).

21. Other wastes generated on ships include manure wastes from the transport of livestock, which ranges from 0.7 to 0.75 kg/head/day for sheep, cattle and goats. Wastes from ship maintenance include metal shavings (3 kg/day), oily machining wastes (5 kg/day), paint (3 kg/day), rust (4 kg/day) and sweepings (1 kg/day).
22. Mr. Brathaug emphasized that reception facilities should be planned and operated with a view to:
  - the quantity and type of ship wastes being handled at the port;
  - the capacity and sophistication of the existing land-based waste management system in the port and surrounding community; and
  - the practicality of integrating land-based and sea-based waste treatment and disposal systems.

It was pointed out that marinas and other small harbours do not need complex, expensive facilities for receiving, handling and managing wastes from small vessels or recreational boats. Rather, the concept of an "environmental station" for receiving, segregating and managing small volumes of oily waste, glass, plastics, sewage, etc. could be developed and operated at minimal cost, using locally available equipment, materials and know-how.

23. Mr. Alam referred to the provision of shore reception facilities in Singapore. The oily waste reception facilities were first commissioned

by the Port of Singapore Authority (PSA) in 1973. In 1993, the shore reception facilities were privatized. A private company was organized, comprised of PSA (50% shareholder) and four shipyards (50% shareholder). The company, Singaport Cleanseas Pte. Ltd., operates a receiving, treatment, incineration and disposal facility at Sebaraok island.

24. In addition to the Singaport operation, oily waste reception facilities are also available at 5 terminals operated by multi-national oil companies. The terminals receive oily ballast water, tank washings, oily bilge water and oil purifier sludges from tankers unloading at the refineries. Smaller individual operators, licensed by the Ministry of Environment (ENV), collect oily wastes from smaller vessels, for transport to approved refining or processing facilities.
25. Mr. Alam went on to explain that all tank cleaning is completed by licensed contractors at designated anchorages in the port area. All tank cleaning is strictly monitored and controlled. The contractors must ensure that wastes are properly handled and disposed of. They must not carry out any tank cleaning activities outside Singapore waters. If they violate any of these conditions, their licences may be cancelled. Ships calling at Singapore for repairs at shipyards and coming in "clean condition" must declare where and how they disposed of their wastes. If the MPA is not satisfied with their declaration, they are not allowed to proceed to the shipyards.
26. Chemical wastes are received at two terminals. A floating barge (20 m<sup>3</sup>) and tank truck for Category A, B, and C wastes are employed by GATX Terminal Pte. Ltd. A fixed facility (20 m<sup>3</sup> per day capacity) is used at the Shell terminal for Category B chemical wastes.
27. Garbage collection services are currently being provided by the MPA. Costs for these services are covered by the port dues for vessels. Private contractors can be employed to receive large volumes of garbage and sewage from cruise and war ships.
28. Mr. Alam informed the group that Singapore's regulations give responsibility to MPA for management and control of all marine pollution in the territorial sea, whether originating from sea operations or from the land. The Ministry of the Environment has responsibility for controlling industrial and municipal effluents and emissions and the discharge of pollutants into river waters. They also have overall responsibility for protecting Singapore's environment, including the marine environment.

### Site Visit to Singaport CleanSeas Pte, Ltd.

29. Mr. Cheong Choon Wah, Operations Manager for Singaport Cleanseas Pte, Ltd. (SCPL) introduced the group to the shore reception facility and the company. The facility is designed for treatment and disposal of MARPOL Annex I wastes, oil slops and sludge. The operation is supported by a fleet of barges and two tankers (1,850 dwt and 1,077 dwt) capable of carrying out the transportation of oily wastes to the treatment facility. The facility itself includes an oil sludge treatment plant (10,000 tonnes per annum), a slop treatment plant (50 m<sup>3</sup> per hour) and 5 storage tanks (35,000 m<sup>3</sup> capacity). Plans are underway to upgrade the facility, with a new sludge treatment plant (30,000 tonnes per annum capacity) and a new slop treatment plant (200 m<sup>3</sup> per hour capacity).
30. Mr. Cheong explained the existing user fee system at SCPL. The fee schedule consists of S \$12 per m<sup>3</sup> for slops and S \$350 per tonne of oily sludge. The system also includes a rebate to the shipping companies for oil that is recovered from the collected wastes. The user fees are collected from the ship agents in Singapore.
31. About 400 tankers are serviced per year. The procedures employed in collection and treatment of Annex I wastes were described as follows:
- 31.1 the shipping agent files a declaration of arrival with MPA
  - 31.2 an application for discharge of oily wastes is submitted; transfer of oily wastes occurs upon approval of the Port Master;
  - 31.3 reception vessels are deployed to the ship when it arrives;
  - 31.4 sampling and sounding of the ship wastes are conducted prior to discharge, to determine the quantity and quality of oily waste. (Analysis of the samples are completed at an independent private laboratory.)
  - 31.5 if tank cleaning is required, ship agents are responsible for contracting registered cleaners.
32. MPA maintains a regulatory role over the shore reception operations and is responsible for registration of tank cleaners, licensing of collectors and transporters and enforcement through port safety inspectors.
32. Mr. Cheong's lecture was followed by a tour of the SCPL treatment facility.

**Session 4: MARPOL Implementation and Marine Administration**

33. Mr. Brathaug reviewed the organization of marine administrations, focusing on small administrative offices. He reinforced the concept that, although small administrations will need to delegate responsibilities to other agencies, they need to keep some responsibilities in order to maintain expertise and involvement in the survey and certification of ships. For example, when delegating duties to classification societies, the option of full authority versus limited or partial authorities needs to be considered. An IMO model agreement for delegation of authority was distributed (Annex 8).
34. Mr. Alam explained the organizational structure of MPA. He described the role of MPA in the implementation of MARPOL as follows:
- 34.1 surveys and certification of vessels, including delegation of such responsibility to classification societies;
  - 34.2 provision of exemptions from requirements;
  - 34.3 port state control and the implementation of the Tokyo Memorandum of Understanding;
  - 34.4 investigation of incidents involving flag vessels;
  - 34.5 monitoring of IMO developments;
  - 34.6 appointment of MARPOL surveyors;
  - 34.7 appointment of laboratory analysts, for providing evidence in prosecutions;
  - 34.8 approval of equipment;
  - 34.9 monitoring and detection of marine pollution, in co-operation with the Police Coast Guard, Republic of Singapore Navy and civilian and government aircraft;
  - 34.10 controlling importation and exportation of non-categorized chemicals on ships;
  - 34.11 controlling the movement of vessels carrying dangerous
  - 34.12 ensuring the provision of shore reception facilities for ships at anchorages.
35. Mr. Alam stressed that implementing regulations for MARPOL must be practical and must consider the technical and administrative requirements and capacities of the respective governments and ports. Singapore's regulations were based on national regulations from the UK and Australia, but modified to suit the situation in Singapore.
36. Ms. Gina Bernad introduced model MARPOL legislation which had been developed by IMO for countries in the Wider Caribbean. She explained

that model legislation, while serving as a framework for countries to consider in the development of their own legislation, should not simply be adopted without due consideration of the political, legal and regulatory system. It was pointed out that no model legislation can address these unique characteristics, which need to be understood and incorporated into national implementing legislation.

37. Mr. Beckman reviewed Singapore's implementing legislation for MARPOL entitled, Prevention of Pollution of the Sea Act and Regulations. He cautioned that countries should not include implementing regulations as part of the implementing national Act, because of the difficulties and time requirements that are encountered when modifications to regulations are required. Mr. Beckman suggested that countries have a couple of options, namely:

37.1 include framework legislation in the Act, and give the responsible Minister the authority to amend the regulations as necessary;

37.2 include framework legislation in the Act, and include a clause incorporating automatic application of amendments, in accordance with changes to the MARPOL 73/78 and its annexes.

38. Mr. Beckman stressed that regulations must be flexible in order to keep up with the changes that occur at IMO and nationally. The group was urged to involve legal experts and MARPOL practitioners in the development of implementing legislation.

### **Work Group Sessions**

39. Two work group sessions were held during the workshop. The purpose of the sessions was to identify priority issues and to prepare a work plan which:

39.1 promotes the development of appropriate and sustainable shore reception facilities and services, in accordance with MARPOL requirements; and

39.2 leads to the development of appropriate policy instruments and supporting administrative infrastructures to achieve full implementation of MARPOL.

The results of the two working group sessions were reviewed in the plenary, focusing on short-term, practical activities that could be implemented over the next 12-month period. The final workplans for each of the participating countries are included in (Annex 1).

### Workshop Closing

40. The workshop closed with statements from the participants and organizers. Captain Lumentah felt that the exchange of information among the participants was extremely valuable and that the short-term initiatives outlined in Indonesia's work plan were needed in order to overcome existing impediments. Mr. Thuong emphasized that the maritime and petroleum sectors were growing rapidly in Vietnam and that assistance was required from IMO in order to stay abreast of pollution prevention requirements, technologies and practices. Mr. dela Cuesta felt that the workshop was valuable in that it provided an opportunity to share experiences and issues among Asian neighbours and to identify mechanisms that will assist the Philippines in the ratification of MARPOL. Mr. Sam indicated that Cambodia is just beginning to evolve its maritime administration and legislation and needs help in promoting an understanding of the importance of marine pollution prevention and management among government and the general public.
41. Mr. Beckman and Professor Koh expressed their appreciation to IMO, MPA and the participants for their contribution to a successful workshop. Mr. Alam indicated the possibility of MPA becoming more involved in technical co-operation and assistance activities with ASEAN countries. He informed the group of previous arrangements involving on-the-job training of surveyors and technical support through the Ministry of Foreign Affairs. Mr. Alam then thanked the organizers and participants for the opportunity provided by the workshop. On behalf of IMO, Mr. Brathaug expressed appreciation to APCEL and MPA for their support in preparing for and implementing the workshop. He indicated that the quality of the workshop was superior because of the interest and active participation by all the country representatives.
42. The workshop closed at 16:35, 1 November 1996.



**IMO/APCEL/MPA WORKSHOP ON THE  
RATIFICATION AND IMPLEMENTATION OF MARPOL 73/78**

**Annex 1**

**Country Work Plans**

**IMO/APCEL/MPA Workshop**  
**Ratification and Implementation of MARPOL 73/78**  
**Cambodia's Work Plan**

**Issues to be addressed:**

1. Lack of awareness among government agencies and the private sector in Cambodia concerning the extent of obligations under MARPOL 73/78 and related marine pollution prevention and management issues;
2. No regulations and very limited experience and capacity to plan, develop and implement marine pollution prevention and management programs;
3. Limited shipping traffic in the two ports in Cambodia (i.e., Phnom Penh 360 ship visits/year; Sihanoukville 180 ship visits/year) to warrant sophisticated shore reception facilities;
4. No control over ship wastes generated and disposed by a large fishing fleet (> 10,000 vessels) operating out of Cambodian ports.

**Work Plan:**

1. Organization of a national seminar for government officials and the private sector to explain the basic obligations and benefits of MARPOL;
2. Identification of the roles, responsibilities and capacities of government agencies and authorities to implement obligations identified under MARPOL;
3. Implementation of a legal drafting workshop to prepare national implementing legislation;
4. Completion of a series of training sessions to build human resource capacity among national government agencies, provincial environment agencies, port operators and the private sector (e.g., shipping industry; etc.) on the administration of MARPOL, setting up and operating appropriate shore reception facilities, and procedures for storing, treating, disposing and unloading wastes from vessels;
5. Preparation and implementation of a public awareness and information program designed to enhance the general public's concern and support for pollution prevention and management in the coastal and marine waters of Cambodia.

**IMO/APCEL/MPA Workshop**  
**Ratification and Implementation of MARPOL 73/78**  
**Indonesia's Work Plan**

**Issues to be addressed:**

1. Lack of expertise to establish cost-effective shore reception facilities throughout Indonesia;
2. Disposal of slops is not in accordance with good practice;
3. Implementation of Annex V of MARPOL needs to be achieved;
4. Overlapping jurisdictions is occurring among different agencies, resulting in high cost of implementation;
5. Enforcement of MARPOL regulations is weak because of lack of trained personnel and facilities.

**Work Plan:**

1. Organization of a technical workshop to promote awareness and to develop expertise in the establishment of cost-effective reception facilities. The workshop will emphasize the interrelationship between MARPOL and other transportation and environmental regulations in order to establish a consistency among regulations.
2. Development of options for moving from a situation of limited or no shore reception facilities in ports and harbours, to provision of adequate and practical facilities and services, including legalizing and controlling the involvement of the private sector in receiving, handling, treatment and disposal of ship-generated oily wastes and garbage. In this connection, a national user fee system for shore reception facilities and services, covering ship-generated oily wastes and garbage, will be developed. The user fee system will include an incentive scheme to promote waste reduction, reuse, recycling and recovery opportunities on-board vessels and in land-based waste management operations;
3. Development of a national regulation for implementation of Annex V of MARPOL;
4. Review of existing institutional and organizational arrangements for monitoring and enforcement of marine pollution prevention and

management regulations, and development of a collaborative and co-operative framework among concerned agencies;

5. Preparation and implementation of an education and awareness campaign focused on the shipping industry, petroleum and chemical companies, private entrepreneurs in the waste management service industry, and port and terminal operators to enhance the government's commitment, strategy and schedule for bringing concerned parties into compliance with existing regulations and master plan;
6. Organization of a national workshop to present the strategy, schedule, actions and options for achieving full compliance with control instruments and policies to the key stakeholders in the public and private sectors;
7. Achievement of consensus among stakeholders, including agreement on the roles, responsibilities and commitment of entities to comply with actions within the negotiated timeframe; and
8. As required, development of proposals for submission to international financial institutions, funding agencies and investors in the private sector, regarding the development, construction and operation of shore reception facilities.

**IMO/APCEL/MPA Workshop**  
**Ratification and Implementation of MARPOL 73/78**  
**Philippines' Work Plan**

**Issues to be addressed:**

1. Lack of political will and awareness concerning state of marine pollution and socio-economic impact;
2. Fragmented environmental legislation and overlapping responsibilities in the enforcement and administration of existing regulations;
3. Lack of comprehensive baseline data on ports and harbours (both public and private), their current capacities in waste reception facilities and services, and the types, volumes and characteristics of ship-generated waste being unloaded or discharged;
4. Lack of concern from private sector regarding marine pollution prevention and management;
5. Need for stronger co-ordination among government agencies at the national level, among different levels of government, and with the private sector, to enhance the ratification and implementation process in the Philippines.

**Work Plan:**

1. Organization of a workshop with public and private sectors to identify existing capacities and resources that are being applied to develop and implement MARPOL, current gaps and overlaps in jurisdictions and drafting of a plan and time schedule for proceeding with ratification of MARPOL;
2. Completion of a comprehensive assessment of current waste generation rates and characteristics of ship-generated wastes for domestic and international ships, using available secondary data (e.g., World Bank Study) and estimations based upon ship calls, ship types and cargoes carried;
3. Evaluation of the current situation with respect to shore reception facilities and services being provided in public and private ports throughout the Philippines, and identification of the strengths, short-

comings and gaps in receiving, handling and disposing of vessel-generated wastes among the different sizes and categories of ports;

4. Examination of the current roles and responsibilities of concerned national agencies (e.g., Philippines Ports Authority; Philippines Coast Guard; Department of Environment and Natural Resources; MARINA; Bureau of Customs; Department of Energy; Bureau of Fisheries and Aquaculture Resources; etc.) as defined in existing regulations, policies, programs, Administrative Orders, Presidential Decrees, Memoranda of Cabinet, etc. regarding marine pollution management and prevention;
5. Identification of key players in the private sector (e.g., shipping companies; petroleum companies; chemical companies; PNOC; etc.) who will be directly affected by efforts to ratify and implement MARPOL 73/78;
6. Development of options for moving from a situation of limited or no shore reception facilities at ports and harbours, to full implementation of MARPOL, and formulation of a strategy and timeframe for achieving such options;
7. Development and implementation of an awareness and education campaign among politicians, government agencies, the private sector and the general public on the costs and benefits of ratification and implementation of MARPOL 73/78.

**IMO/APCEL/MPA Workshop**  
**Ratification and Implementation of MARPOL 73/78**  
**Vietnam's Work Plan**

**Issues to be addressed:**

1. Lack of awareness among the general public, government and the private sector in Vietnam for protection and preservation of the environment and for marine pollution issues;
2. Inadequate control instruments/regulations and limited experience and capacity to plan, develop and implement marine pollution prevention and management programs, including oil spill preparedness and response capabilities;
3. Limited financial resources to support the planning, development, construction and operation of shore reception facilities and associated waste treatment and disposal facilities;
4. Limited human resources with the necessary knowledge, skills and experience to implement, monitor and enforce MARPOL 73/78 and OPRC 1990;
5. Promotion of technical co-operation and assistance among ASEAN countries in the implementation of MARPOL.

**Work Plan:**

1. Organization and implementation of a series of seminars in northern, central and southern Vietnam for government agencies and the private sector to identify the obligations, benefits and processes for implementation of MARPOL 73/78, as well as other IMO conventions;
2. Preparation of a comprehensive assessment of current waste generation rates and characteristics of ship-generated wastes for domestic and international ships, using available secondary data and best estimates based upon ship calls, ship types and cargoes handled at ports throughout Vietnam;
3. Clarification of the key elements of MARPOL 73/78 and related obligations/requirements which are relevant to Vietnam, based upon the results of the comprehensive assessment;

4. Preparation of options and strategies for moving from a situation of limited or no shore reception facilities at ports and harbours, to provision of adequate and practical facilities, and eventually to full implementation of MARPOL. Identify a timeframe and estimated costs for implementing various options;
5. Development and implementation of an information campaign among concerned government agencies, the private sector and the general public, as appropriate, explaining the requirements of MARPOL, the options available for meeting those requirements and the short-term and long-term benefits of marine pollution prevention and management to the people of Vietnam; and
6. Preparation of proposals for technical co-operation and assistance to develop capabilities in the implementation of MARPOL among ASEAN countries.



# IMO/APCEL/MPA WORKSHOP ON THE RATIFICATION AND IMPLEMENTATION OF MARPOL 73/78

## Annex 2

### List of Participants and Resource Persons

Co-  
Facilitator  
Capt. [Name]  
Head [Name]  
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**IMO/APCEL/MPA WORKSHOP ON THE  
RATIFICATION AND IMPLEMENTATION OF MARPOL 73/78**

**Annex 3**

**Annotated Agenda**

**IMO/APCEL/MPA WORKSHOP ON THE  
RATIFICATION AND IMPLEMENTATION  
OF MARPOL 73/78**

**30 October to 1 November 1996  
Singapore**

Meeting Room 1  
Faculty of Law  
National University of Singapore  
Tel: (65) 772-6246 (APCEL)

**Annotated Agenda**

**Objective:** *The workshop will develop individual work plans which can be employed by the four participating countries in the short-term to strengthen instruments, infrastructures and capacities for ratifying and implementing MARPOL 73/78.*

Wednesday, 30 October 1996

**Session 1: Opening Session**

- 09:00 - 09:30 Welcoming remarks
- Henning Brathaug, International Maritime Organization (IMO), London  
Prof. Koh Kheng Lian, Director, Asia-Pacific Centre for Environmental Law (APCEL)  
Zafrul Alam, Maritime and Port Authority of Singapore (MPA)  
Dr. Chua Thia-Eng, Regional Programme Manager, GEF/UNDP/IMO Regional Programme on the Prevention and Management of Marine Pollution in the East Asian Seas
- 09:30 - 10:00 Overview of the MARPOL Project and the IMO/APCEL/MPA Workshop
- Adrian Ross, IMO Manila

10:00 - 10:30 Ratification and Implementation of MARPOL: Key Considerations and Obligations

Henning Brathaug, IMO London  
10:30 - 11:00 Coffee Break

**Session 2: National Profiles**

11:00 - 12:00 National Profile review by each participating country

12:00 - 12:30 General discussion on national marine pollution programs and the implications with respect to ratification and implementation of MARPOL 73/78

12:30 - 13:30 **Lunch**

13:30 - 14:30 Discussion on the preparation/finalization of National Profiles on Marine Pollution Prevention and Management in Cambodia, Indonesia, Philippines and Vietnam

Adrian Ross, IMO Manila

**Session 3: Port Reception Facilities**

14:30 - 15:00 Planning Port Reception Facilities: Strategies and Preparatory Activities

Henning Brathaug, IMO London

15:00 - 15:30 Financing, Operating and Administering Port Reception Facilities and Services

Zafrul Alam, MPA Singapore

15:30 - 16:00 Tea Break

16:00 - 17:00 **Working Group on Port Reception Facilities**

The workshop will break into four working groups, one for each participating country. With the support of resource persons, each group will identify the priority issues with respect to the development and/or enhancement of port reception facilities. Following the development of

priority concerns, each working group will devise early steps for evolving appropriate and sustainable reception facilities and services, in accordance with MARPOL requirements, and in consideration of local, national and subregional waste management policies, programmes and capacities.

17:00 Wrap-up/return to hotel

**Evening Official Welcoming Dinner hosted by the Maritime and Port Authority of Singapore**

Assemble in the hotel lobby by 19:20. Depart for the dinner venue at 19:30.

Thursday, 31 October 1996

**Tour of Port Reception Facility, Port of Singapore**

08:15 Assemble in the hotel lobby

08:30 Depart for the World Trade Centre

09:00 - 10:00 Conference Room, Shipping Division, MPA  
World Trade Centre

Friday

Presentation by: Mr. Cheong Choon Wah  
Operations Manager  
SINGAPORT CLEANSEAS Pte Ltd.

10:15 Depart by launch to Pulau Sebarok

10:30 - 11:30 Tour of Reception Facility operated by SINGAPORT  
CLEANSEAS Pte Ltd.

11:30 Return to the World Trade Centre and to NUS

12:30 - 13:30 **Lunch**

13:30 - 14:30 **Working Group on Shore Reception Facilities (continued)**

14:30 - 15:30 Presentation/Review of the Working Group Action Plans

15:30 - 16:00 Tea Break

## SCHEDULE OF WORKSHOPS AND MEETINGS OF MARPOL

### **Session 4: MARPOL Implementation and Marine Administration**

- |               |   |
|---------------|---|
| 16:30 - 16:45 | Basic Marine Administration<br>Henning Brathaug, IMO            |
| 16:45 - 17:00 | Singapore's Marine Administration<br>Zafrul Alam, MPA Singapore |
| 17:00 - 17:15 | Model MARPOL Legislation<br>Ms. Gina Bernad, IMO Manila         |
| 17:15 - 17:30 | Singapore's Implementing Legislation<br>Robert Beckman, APCEL   |
| 17:30         | Wrap-up/return to hotel   |

### **Free Evening**

Friday, 1 November 1996

- |               |   |
|---------------|---|
| 09:00 - 09:30 | General discussion on national marine administration and implementing legislation |
|---------------|---|

### **Session 5: Implementation of MARPOL Annexes**

- |               |  |
|---------------|--|
| 09:30 - 10:00 | MARPOL Annexes and their Requirements<br>Henning Brathaug, IMO London              |
| 10:00 - 10:30 | Implementation of Annexes I, II and III by Singapore<br>Zafrul Alam, MPA Singapore |
| 10:30 - 11:00 | Coffee Break   |



**11:00 - 12:30      Working Group on Implementation of MARPOL**

The workshop will break into four working groups, one for each participating country. With the support of resource persons, each group will identify priority issues associated with:

- a) national legislation;
- b) marine administration;
- c) infrastructure and support services; and
- d) human resource capacity.

and devise early steps for advancing or improving the implementation/enforcement of national legislation.

**12:30 - 14:30      Lunch**

**14:30 - 15:30      Presentation and Peer Review of Working Group Action Plans**

**15:30 - 16:00      Tea Break**

***Session 6: National Project Implementation: What next?***

**16:00 - 17:00      Discussion of the steps that need to be taken in order to implement the action plans that have been developed during the workshop.**

**17:00                  Closing of the workshop**

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