

Petroleum Association of Japan

OIL SPILL SYMPOSIUM 1995

INTERNATIONAL COOPERATION AND  
THE CURRENT SET-UP BY THE INDUSTRY

National Framework and The Role of The Oil Industry

INDONESIA (Present Status and Prospect)

1 . INTRODUCTION

*The geographical position of Indonesia, has special values especially from view of the economic and environmental aspects. It is located in the long tradition shipping lanes connecting Australia, New Zealand, For East, Middle East, other parts of Asia, America even Africa and Europe.*

*Indonesia also endowed with rich ecological values, i.e. flora and fauna including its marine resource. It is then understood that the preservation of marine environment in this area is not only for the interest of Indonesia but also have a global concern.*

*The Government of Indonesia had partake at various important international, regional as well its national efforts to safeguard this rich inheritance for its preservation.*

*Therefore all efforts including co-operations connected with the conservation of marine resources are supported and motivated, also for the prevention, preparedness and responses to marine oil spill.*

2 . VULNERABILITIES

*Areas of vulnerabilities to oil spills are determined among others by the:*

- *sensitive areas*
- *shipping lanes, especially tanker traffic*
- *offshore oil and gas activities*
- *marine terminals*

2 . 1 SENSITIVE AREAS

*Appendix I shows a sample of the map of one sensitive area in Indonesia.*

*The marine areas specified as sensitive are : coral reefs, wetlands, mangroves, whales, dugongs, sea turtles, seabirds and waders, cocanut crabs, fisheries, milkfish fry, algae and others.*

## 2 . 2 SHIPPING LANES

*Indonesia had ratified the United Nations Convention on the Law of The Sea (UNCLOS) 1982 thru her Act No. 17 of 1985 which is now enforced interna-tonally since November 1994. Therefore its national jurisdiction area is approximately 8 million square miles (including the exclusive economic zones). Due to its archipelagic nature, and refer to Article 53 this Convention, the Government are processing the establishment of official shipping lanes, the proposed draft appears in Appendix II.*

*The proposed archipelagic sea lanes other than Malacca/Singapore Straits are :*

- (1) Sunda Strait - Java Sea - Karimata Strait - Natuna Sea - South China Sea*
- (2) Lombok Strait - Makassar Strait - Sulawesi Sea*
- (3a) Sawu Sea - Ombai Strait - Banda Sea - (West of Buru Island) - Serarn Sea - (East of Mangoli Island) - Maluku Sea - Pacific Ocean*
- (3b) Timor Sea - Leti Strait - Banda Sea - (West of Buru Island) - Serarn Sea - (East of Mangoli Island) - Maluku Sea - Pacific Ocean*
- (3c) Arafur Sea - Banda Sea - (West of Buru Island) - Serarn Sea - (East of Mangoli Islan) - Maluku Sea - Pacific Ocean*

*with the possibility of future modifications or alter ations.*

*The inland water traffic followed the traditional navigation sea-lanes as indicated in the map shown at Appendix III.*

*Tanker traffics and important marine terminals locations have been marked separately for clarification on the above mentioned maps*

*In fact there are 122 marine tanker terminals throughout Indonesia, 14 for them are classified as large terminals, 22 are medium and the rest are small terminals.*

## 2 . 3 OFFSHORE OIL AND GAS ACTIVITIES

*Appendix IV shows the map of oil and gas activities specifically for offshore operations which vulnerable to the safety of navigation thus have the threat to possible oil spill incident occurences.*

*There are good future prospects for offshore oil and gas explorations and productions developments are which eventually will also effect the strategy for preparedness and response : to prevent, mitigate and abating oil spills.*

*Refer to the abouve mentioned informations, the degree of priority of vulnerabitities to marine oil spill it the area are (1) Malacca and Singapore Straits, (2) Lombok-Makassur Straits and*

*Sulawesi Sea, (3) Sundo Strait-Java Sea-karimata Strait and (4) Ntuna Sea-South China Sea, then followed by the other sea areas.*

### **3 . LEGAL JURISDICTION FOR MARINE ENVIRONMENT CONSERVATION**

#### **3 . 1 INTERNATIONAL AND REGIONAL**

*Indonesia had ratified the following International Conventions:*

*UNCLOS 1982 SOLAS 1974 MARPOL 1973/Protacol 1978 Appendix I and II, CLC 1969, IOPCF 1971, STCW 1974, Basel Convention 1985 (for hazard-ous wastes), UNCED Con-vention 1992 and presently are in the process for possible ratification of other Conventions such as: CLC 1984/1992, OPRC 1990, London Dumping Convention, Intervention I The High Seas, MARPOL 1973/1978 Appendixes III thru V.*

#### **3 . 2 NATIONAL COVERAGE**

*Regulations concerning preservations of the environments were enacted through Act No. 4 of 1982 : The Environment Management Act and Act No.5 of 1990 concerning the Protection and Preservation of the Living Environment.*

*A number of Government Regulations as well as Presidential Decree and Guidelines from various Ministries to safeguard marine ecology and preventing marine pollutions have also been issued.*

#### **3 . 3 INDUSTRY SET-UP**

*Guidelines and Contingency Plans for Oil Spill Preparedness and Responses are prepared to comply with the Government Regulations. Moreover, references to international oil and gas practices are adopted or adapted to suit the condition and application in the country or to the appropriate location.*

### **4 . COOPERATIONS FRAMEWORKS**

#### **4 . 1 INTERNATIONAL FRAMEWORK**

*International Agencies : IMO, UNEP, UNDP, World Bank have been involved in a number of coordinative activities supporting the efforts to deal with various environmental issues in the region.*

*Within the ASEAN Organization auspices, the marine environmental aspects are coordinated through the ASOEN (ASEAN Senior Officials for Environ-ment), where Brunel Darussalam chaired the Marine Environment Committee.*

*A tripartite agreement was concluded in 1971 among the Governments of Malaysia, Singapore and Indonesia have to strengthen co-operation among the three coastal states on the safety of navigation (establishment of Traffic Separation Schemes/TSS) as adopted*

*by IMCO (then the International Maritime Consultative Organization) in 1971. Thereinafter, co-operation by the tripartite states with Japanese Consortium is agreed on what is known as the Malacca/Singapore Straits Revolving Fund in 1981. This agreement provide the availability of fund to initiate and operate the oil spill incident abatements in the Malacca and Singapore areas. The costs will be reimbursed to the Revolving Fund after being paid by the Polluter or Liable Parties. Through this scheme, the three countries have also conducted joint exercises in these straits regions.*

*The Philippines and Indonesia have agreed on the Sulawesi Sea Network Cooperations since 1978. Combined exercises by both countries have been conducted annually. Experiences gained from these exercises have proven to be beneficial.*

*Through the OSPAR Project with the Japanese Government under the auspices of the IMO 1990 OPRC Convention, a cooperation to enhance national capabilities within ASEAN countries have been agreed including the supplles of oil spill abatement equipments including communications facilities and data-base systems.*

*Furthermore, the ASEAN Oil Spill Response Action Plan (OSRAP) which is the Regional Contingency Plan have been agreed upon with the signing of the Memorandum of Understanding among the ASEAN Member Countries in May 1993.*

*The ASEAN OSRAP recognizes the Leading Agency from each Member Country which will then coordinate the Supporting Agencies for the purpose of oil spill response and abatement The oil and gas companies operated in Indonesia under Pertamina management are one of these Supporting Agencies. The network are shown in Appendix IV. The National Contingency Planning (NCP) which is still in its draft form had proposed that the Ministry of Communication, i.e. Director General of Sea Communication will act as the National Coordinator for Marine Oil Spill Incident.*

*Government co-optation thru EMDI (Environment Management Development of Indonesia) involving Canada, Australia and Japan have also contribute developments in the coastal management and preservations of endangered marine ecosystems.*

*Government Agencies from USA, UK, Norway, Netherland and other countries have participated in various bilateral or international efforts to assist on the conservations of environmental aspects.*

*The network of National involvement at the International Network is illustrated in Appendix V.*

#### **4 . 2 COORDINATION OF NATIONAL FRAMEWORK**

*Cooperation among National Agencies and industries are coordinated by the National*

*Agency for Planning and Development (BAPPENAS), the Office of The State Ministry of Environment for State Agency for Environmental Impact Management (its Indonesian acronym is BAPEDAL).*

*Joint national or regional marine oil spill exercises involving Indonesia is co-ordinated by the Directorate General of Sea Communication.*

*The NOCOP (National Operation Center for Oil Pollution) was established at the Sea Communication Headwater which linked to various provinces in the country and have the capability to communicate with its counterparts as Leading Agencies in the ASEAN region.*

#### **4 . 3 OIL AND GAS INDUSTRY SET-UP IN NATIONAL FRAMEWORK**

##### **BACKGROUND**

*Referring to the 1945 Constitution, the management of natural resources including oil and gas belongs to the State, therefore Pertamina was established as the State Oil and Gas Mining Enterprise.*

*Pertamina has the responsibility to manage and co-ordinate the various oil and gas industries from many countries operation in Indonesia.*

*There are some advantages gained from the set-up of oil spill preparedness and responses within the industry, i.e. :*

- \* Operating Companies have dual references for compliance :
  - to the Indonesian regulations and Pertamina's guidelines*
  - to its Headquarter' or Company's standard**
- \* These multi-national industries are in many cases advance in their set-up of oil spill management as well as preparedness which eventually will assist Pertamina's ability to set-up standards for compliances.*
- \* Set-up of International or regional co-operations among the multi-national industries' affiliation have further enhance response capabilities of those operators*

##### **ROLE OF THE INDUSTRIES**

*The role of the industries in the marine oil spill incidents are :*

- \* incident derived or involving the industry's interest : the industry will have the initiative role*
- \* incident which is not involve the interest of the industry's interest, the Government*

*will take the initiative role and the industries will be as Supporting Agency as drafted in the NCP.*

*Referring to the "sustainable development principles", the preparedness and response strategies by the oil, gas and geothermal industries are :*

- \* establish tiered response capabilities*
- \* establish equipment stockpile bases refer to the tiered response and risk assessment scenarios*
- \* establish and maintain co-operations among industries, actively partake at national, regional and international co-operations schemes*
- \* maintain and improve preparedness and response capabilities, including facilities, human resources*

*The challenges among others are :*

- \* widespread of locations and areas affecting the effective and efficient span of control which eventually give more financial burdens*
- \* unavailability of infrastructures and facilities to back-up prompt and effective actions, therefore decreasing the preparedness and response capabilities*
- \* financial impacts for the establishments, supply, replenishment of stockpile bases and oil spill equipments.*

#### *SET-UP BY THE INDUSTRY (PRESENT STATUS)*

*The various Government Agencies have always involved Pertamina (representing the oil, gas and geothermal industries operating in Indonesia) on all policy-making processes, activities and co-operations of oil spill issues.*

*At International level, Pertamina is a member of :*

- \* IPIECA (International Petroleum Industry Environmental Association)*
- \* E & P Forum*
- \* World Petroleum Congress*
- \* Industries' employees are also active members of SPE (Society Petroleum Engineers)*

*At Regional Level, in the ASCOPE (ASEAN Council of Petroleum), where co-operations and issues on marine oil spill are coordinated through the ASGES (ASCOPE Study Group on Environment and Safety).*

*It should be noted that co-operations with NORAD (Norwegian Agency for Development) and CCOP (The Committee for Coordination of Joint Prospecting Mineral Resources in ASIA Offshore Areas) are developed including training and education programs on oil spill issues.*

*At the Industry's Corporate Level, the co-operations are coordinated through :*

- \* Pertamina management*
- \* IPA (Indonesian Petroleum Association) at its Environment Committee*

*Through these co-operative efforts and involvements, the industries have opportunities to enhance us well as up-date its management, technical capabilities in order to maintain and catch-up the current International leverage with the dynamic global changes*

*The tiered response srategy of the industry (Appendix VII) are :*

- \* Corporate Level as tier III, the main stockpile base is Tanjung Priok, the harbour of Jakarta.*
- \* 9 (nine) terminals have the tier II capabilities, presently established and will eventually up-graded at : Pangkalan Brandan, Dumai, Tanjung Uban, Jakarta, Cilacap, Surabaya, Balikpapan, Ujung Pandang and Sorong*
- \* 52 terminals have tier I capabilities.*
- \* Small depots handling petroleum products, i.e. gasoil, kerosene and gasoline are equipped with adequate amount of oil boom, sprayers and dispersant to suffice for possible routine spills and not regarded as tier I capability.*

## **5 . CONCLUSION**

*Refer to the vulnerable degree of priorities of sea-lanes as described earlier, the eastern part of Indonesian sea-waters are less prepared compared to the west and this are due to :*

- (1) less oil and gas industries' asctivities in those regions*
- (2) distances involved from Equipment Stockpile Centers are far*

- (3) *inavailability or inadequacy of infra-structures, communication facilities as well as transportations have affected to the prompt and effective response capabilities*
- (4) *to a certain extend : less traffic*

*Nevertheless, the industries' set-up the national frameworks are :*

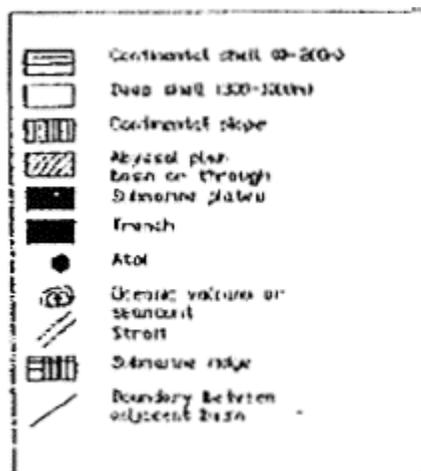
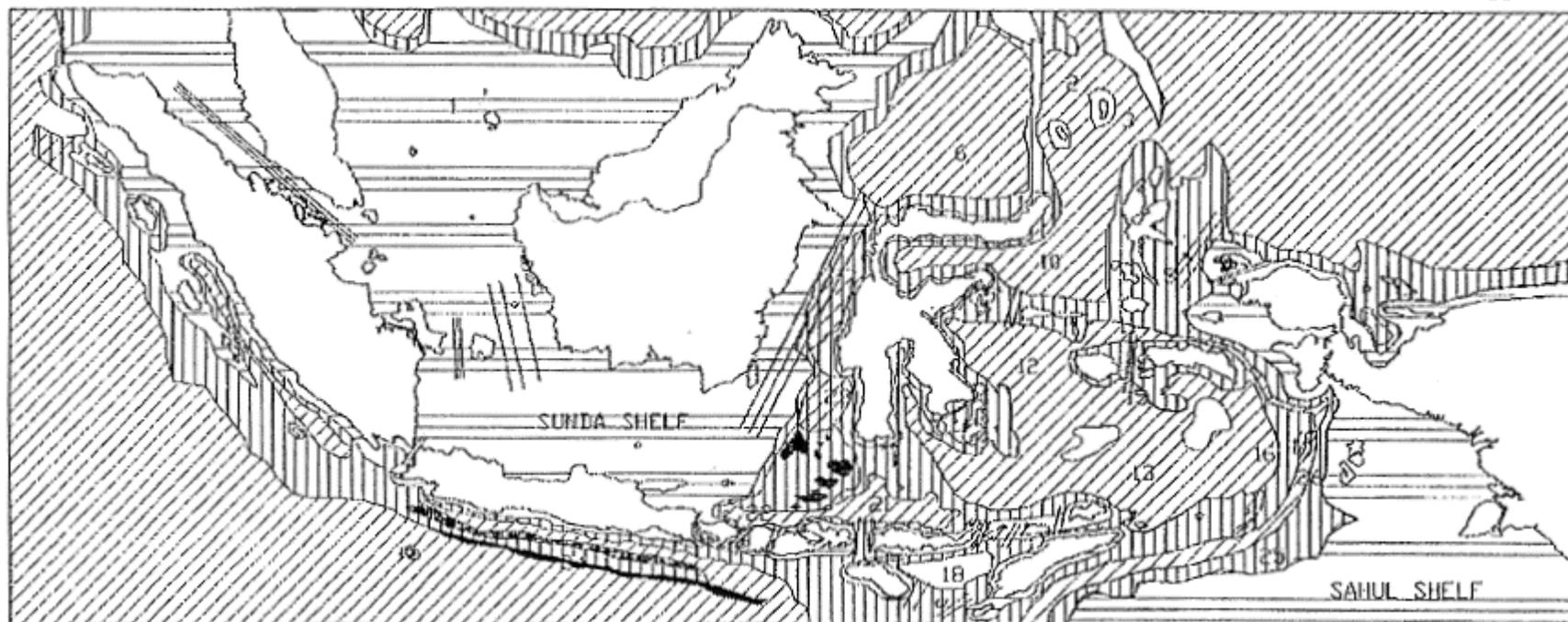
- \* compliance to regulations and company' standards or rules*
- \* strengthen industry's capability for preparedness and response to oil spill incidents focused no the industry's interests or concerns*
- \* to certain extent, play roles as Supporting Agency under government Coordination for oil spill responses*
- \* assist Government Agencies in promoting and improving preparedness to respond to oil spill incidents*
- \* enchance co-operations among industries, Government or other related parties either at local, national, regional or international level to achieve the objective of adequate preparedness to prevent and response*

*With the increasing awareness of co-operative needs, the future prospects of building partnerships at various levels, national or international are neded and very promising and will eventually strengthen the preparedness and response capabilities to safeguard our global marine environments.*

*Jakarta, March 16th, 1995*

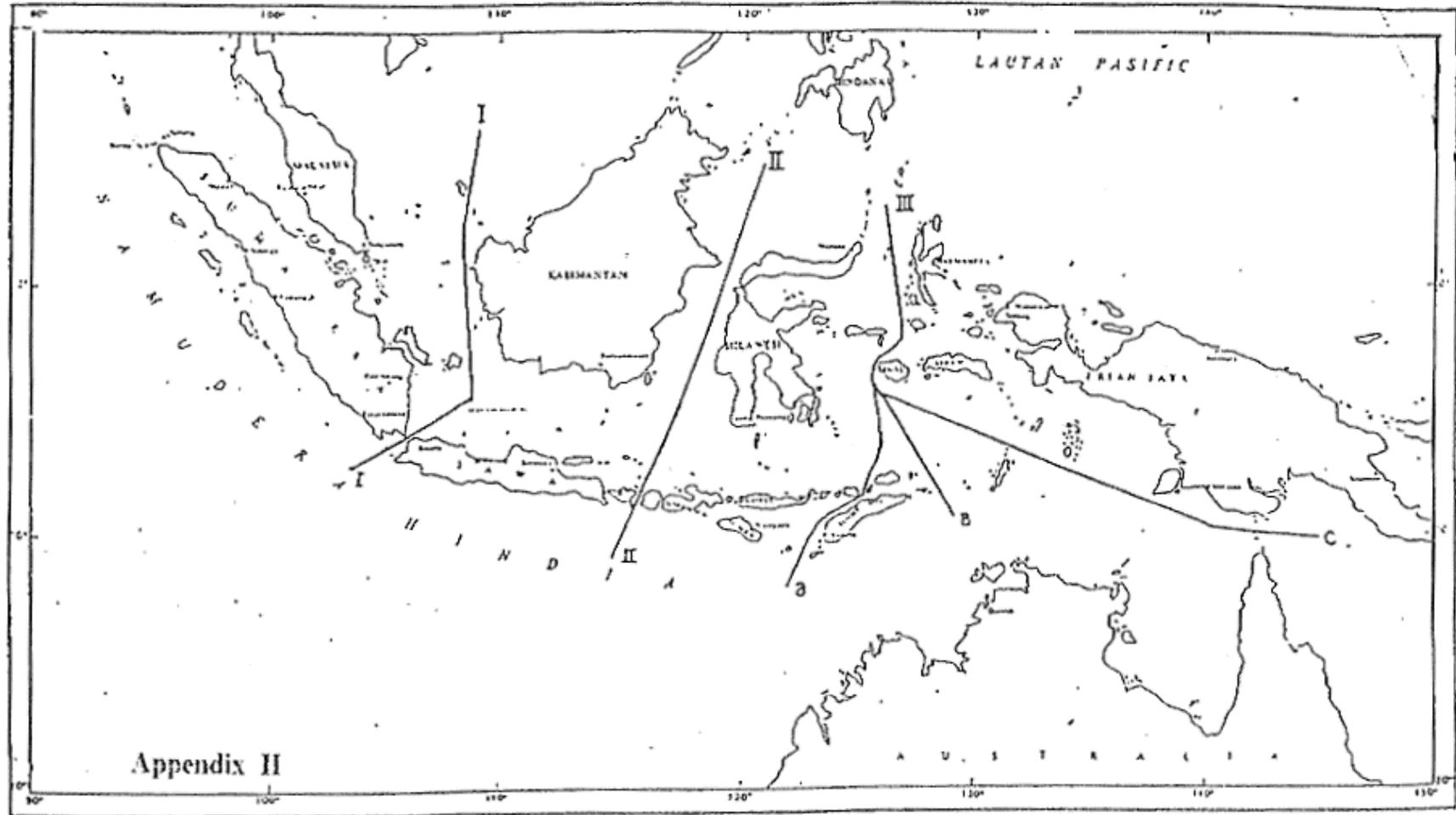
*Prepared by,*

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Pertamina, Indonesia*



1	Indonesian trench	10	Gorontalo basin	19	Butung trough
2	Bangka trough	11	Buru basin	20	Slower trough
3	Tekong trough	12	II Bawak basin	21	Elorom basin
4	Karatai basin	13	S Basak basin	22	Hikabon basin
5	Kuchera basin	14	Kurup basin	24	Jawa trench
6	Sekamra basin	15	Makasa basin	25	Tidar trough
7	Terrate trough	16	Weber deep	26	Aru basin
8	Baca basin	17	Weber trough		
9	Kingala basin	18	Sera basin		

INDONESIA  
MARINE ENVIRONMENT



1) . Sunda Strait - Java Sea - Karimata Strait - Natuna Sea - South China Sea

2) . Lombok Strait - Makassar Strait - Sulawesi Sea

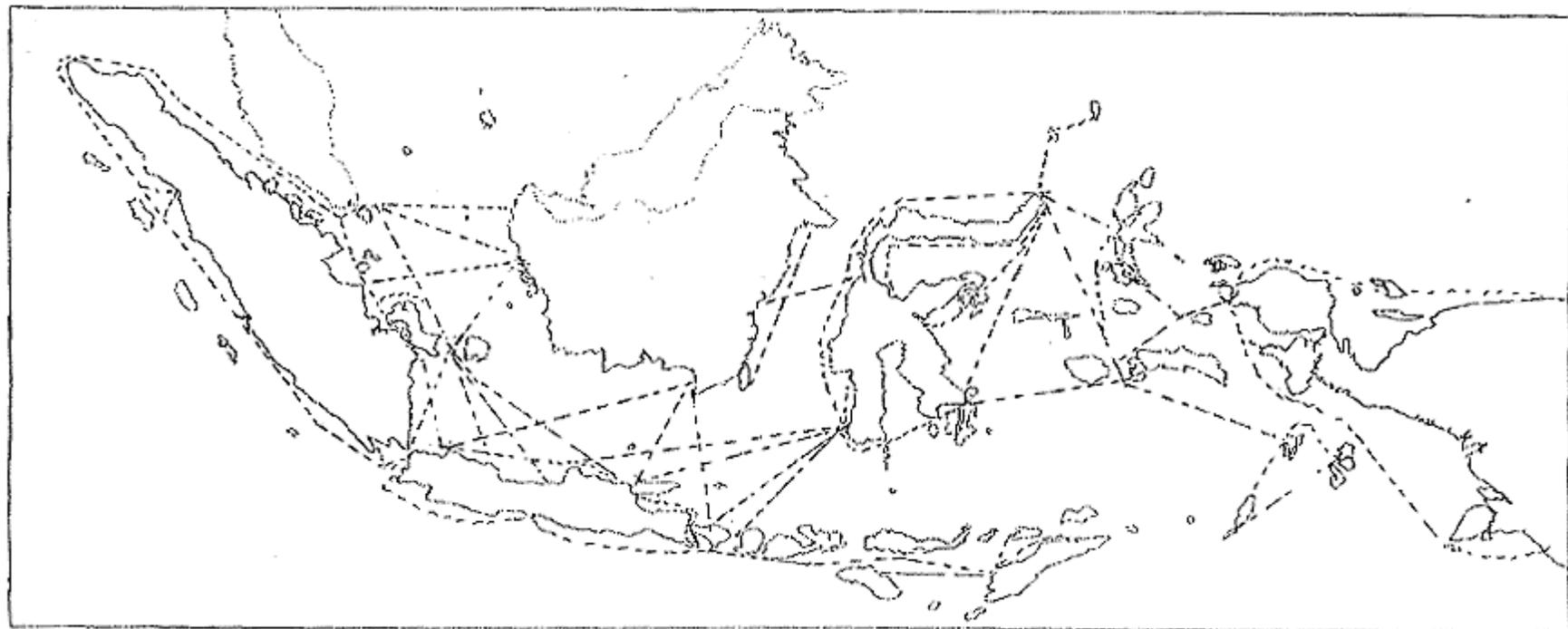
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3b) Timor Sea - Leti Strait - Banda Sea - West of Buru Is. - Seram Sea (East of Mongoli Is.)- Maluku Sea - Pacific Ocean

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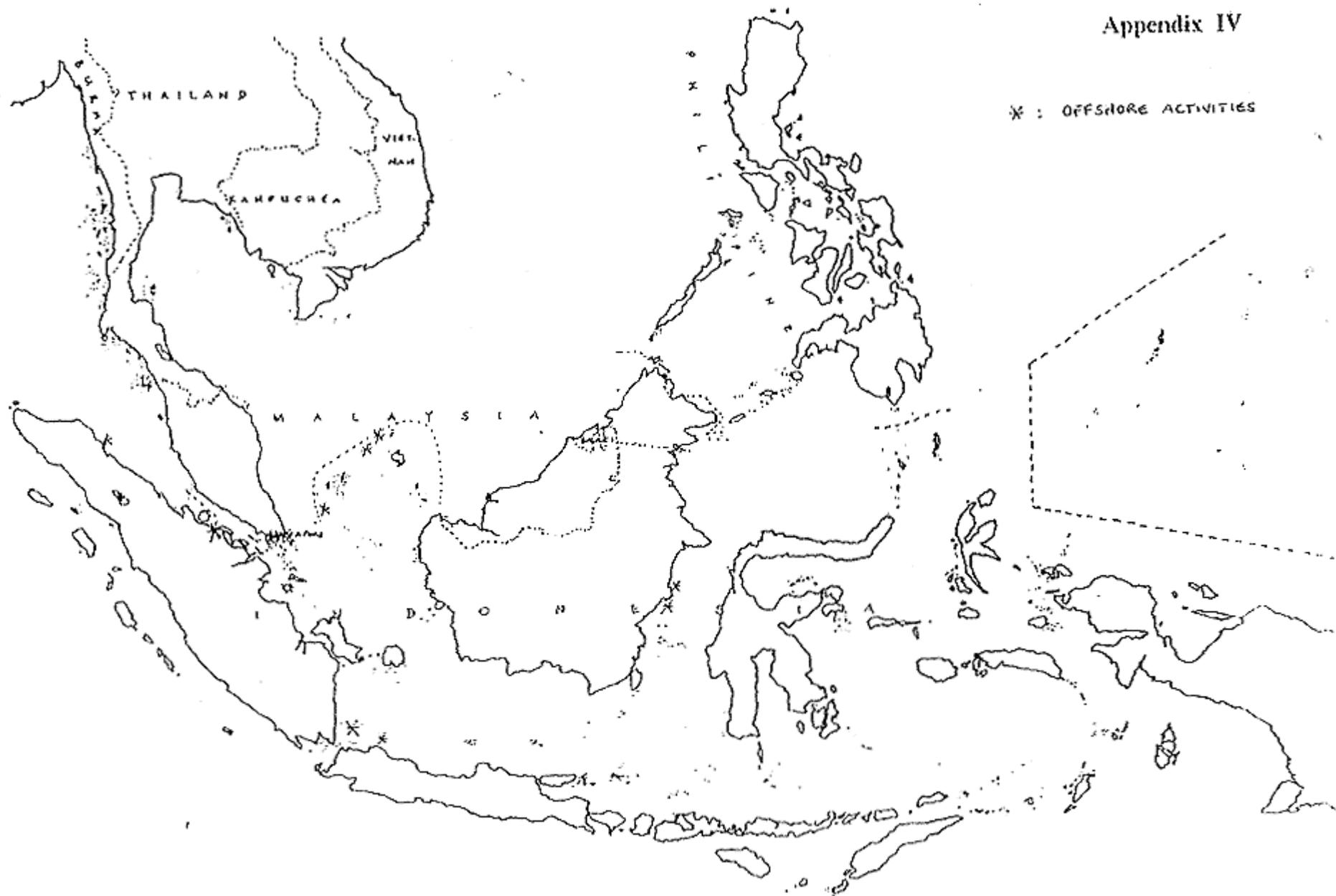
APPENDIX III

INDONESIA inland sea traffic lanse

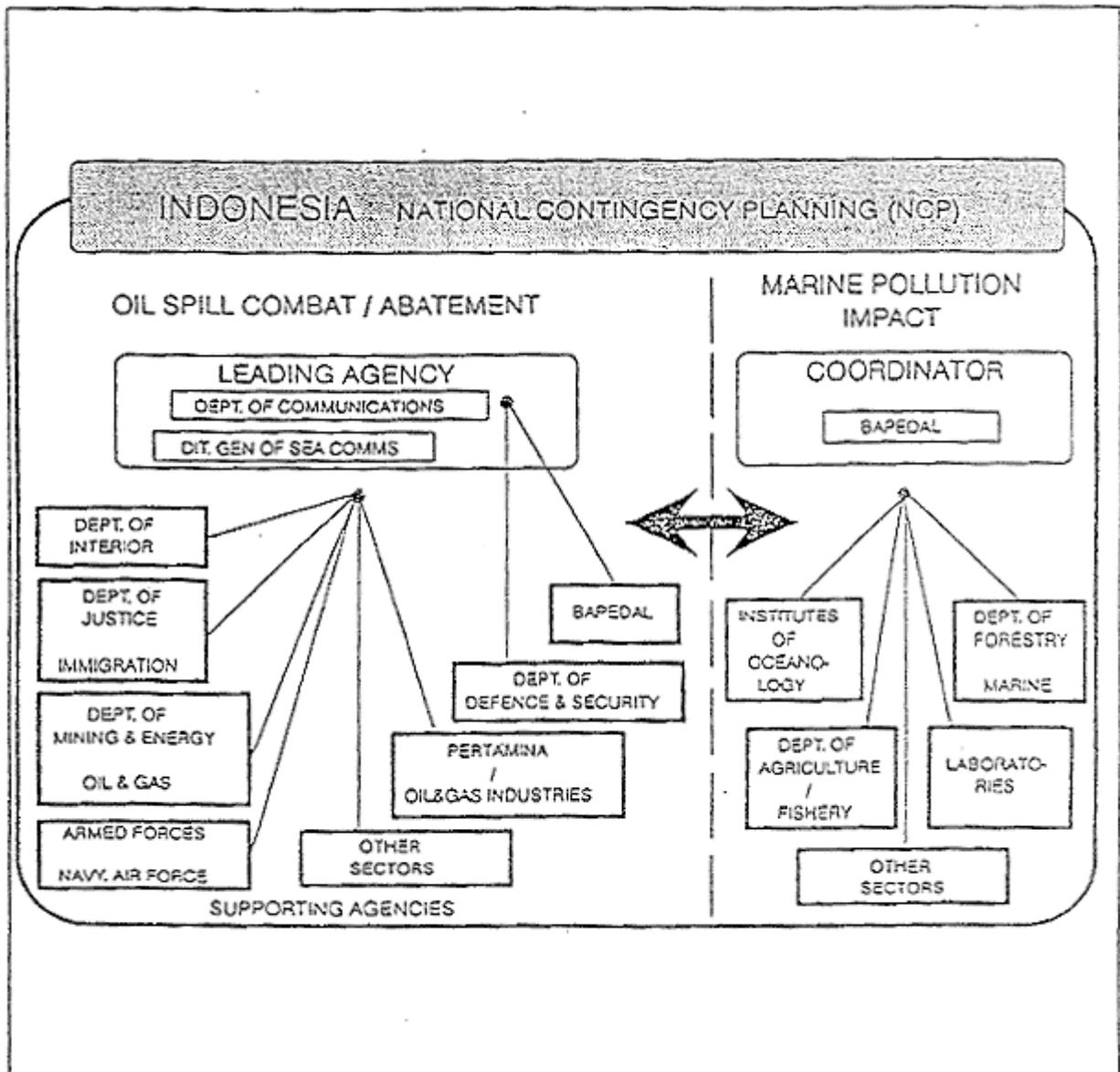


# Appendix IV

\* : OFFSHORE ACTIVITIES



INDONESIA : NATIONAL CONTINGENCY PLAN ( NCP)



Note : Legal binding text still in process for approval Operationally, binding for all Government Agencies & Industries concerned

