UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Governments of ASEAN Countries
(Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand)

PROJECT REVISION

Title: Support to Maritime Sector, ASEAN

Number: RAS/81/055/F/01/19

The budget of the above project is hereby revised to meet the immediate objectives, thus:

(i) to record actual expenditures in 1985 and provisions for expenditures in 1986;

(ii) to implement "training scheme on patrolling and finger-printing techniques, as well as in areas of remote sensing required for a surveillance programme on discharge of bilge water and ballast"; and

(iii) to also implement "assistance in organizing a databank on pollution from ships".

The change to the project budget, UNDP input, is as follows:

Previous UNDP inputs:	US $ 298,379 (line 99 total)
Revised UNDP inputs:	US $ 778,542 (line 99 total)
UNDP input increase:	US $ 480,163

Signed: Phan Wannamethee
on behalf of the Governments of ASEAN Countries

Date: 13 JUN 1986

on behalf of the Executing Agency

Date: 13 June 1986

on behalf of the United Nations Development Programme

Date: 13 June 1986

PART I : Legal Context

This Project Document shall be the instrument referred to in Article I, paragraph one of the assistance agreement between the Governments of the Philippines and Singapore and the United Nations Development Programme signed by the parties on 21 July 1977 and 11 March 1975, respectively.

This Project Document shall be the instrument (therein referred to as a Plan of Operation) envisaged in Article I, paragraph two, of the agreement among the Governments of Indonesia, Malaysia and Thailand and the United Nations Development Programme concerning assistance under the special fund sector of the United Nations Development programme, signed by the parties on 7 October 1960, 25 July 1961 and 4 June 1960, respectively.

PART II A : Development Objectives

The development objectives of the project are:

- to promote self-reliance in the maritime sector ASEAN through in-house training practice and amongst ASEAN members in keeping with IMO and other international conventions relating to the promotion of safety of life at sea and the prevention of marine pollution of the sea by ships;

- to foster closer neighbourhood co-operation activities in merchant marine training, shipbuilding and shipprepairs, facilitation of vessels in ASEAN ports and thereby strengthen self-reliance and co-operation in shipping in general among ASEAN countries.

PART II B : Immediate Objectives

The immediate objectives of the project are:

- to carry out a programme of specialized maritime training for trainers of ASEAN;

- to perform short courses, seminars and study tours in the safety aspects of shipbuilding and shipprepairs;

- to organize a databank on pollution for ships;

- to establish a training scheme on patrolling and finger-printing techniques as well as in areas of remote sensing required for a surveillance programme on discharge of bilge water and ballast.

PART II C SPECIAL CONSIDERATIONS

The proposed project for ASEAN aims at fostering closer ties amongst ASEAN member countries. As a single ASEAN Community, the project aims to preserve and improve environmental conditions in the seas and shorelines surrounding their territories in addition to the promotion of technical co-operation among its own members which to a large extent has already been achieved.

PART II D BACKGROUND AND JUSTIFICATION

The first Inter-Governmental Meeting of Development Assistance Co-ordinators for Asia and the Pacific region was held in New Delhi from 23 to 28 February 1981. The meeting was attended by representatives of Governments in Asia and the Pacific and also the Specialized Agencies of the United Nations. The Inter-Country Programme for 1982-86 was presented by UNDP and duly considered and adopted. The Inter-Country Programme includes a proposal for "support to the maritime sector ASEAN" to be implemented in early 1982 within an allocation of funds in the region of US$1.0 million. The relevant part of the adopted report reads:

"A programme of projects in the maritime sector for the ASEAN countries would include an in-depth study of shipping requirements for extra-ASEAN trade; specialized maritime training for specially trained personnel as required by IMO Conventions; standardization of curriculum for maritime training; a shipping management course; short courses, seminars and study tours in safety aspects of practical shipbuilding and shiprepai; standardization of documents and procedures for clearance of vessels at all ASEAN ports; and shipping co-ordination assistance."

Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand are the six member states that comprise the Association of Southeast Asian Nations (ASEAN). The highest decision-making body is the Council, which consists of Economic Ministers (or their delegates) as representatives of their respective States.

The ASEAN Committee on Transportation and Communications (COTAC), the Secretariat of which is located in Kuala Lumpur, Malaysia, is responsible to the ASEAN Economic Ministers for the planning and development of projects in the promotion of the ASEAN Community as a whole. In October 1980 the 10th Meeting of the ASEAN Economic Ministers endorsed a list of COTAC projects which contained important proposals for the development of maritime sectors in the ASEAN.

Further, the 9th Meeting of COTAC which was held in Penang, Malaysia, examined the project proposals endorsed by UNDP for assistance and agreed to, amongst others, financing by UNDP and implementation by IMO of the "Support to the maritime sector ASEAN" project, under the UNDP Inter-Country Programme 1982-1986 and also in co-ordination with the ASEAN Integrated Work Programme in Shipping (IWPS) which was also adopted by the 9th COTAC Meeting.

The UNDP/COTAC approved programme for IMO's execution under "Support to the maritime sector ASEAN" umbrella project contains the following broad activities:

(1) Specialized maritime training for personnel required under IMO's International Convention of 1978 for Training, Certification and Watchkeeping, and for Survival at Sea. Training in fire-fighting techniques.

(2) Short courses, seminars and study tours in the safety aspects of practical shipbuilding and shiprepair.

(3) Training schemes on patrolling and finger-printing techniques, as well as in areas of remote sensing, required for a surveillance programme on discharge of bilge water and ballast.

(4) Assistance in organizing a databank on pollution for ships.

The UNDP/COTAC also approved the procurement and installation in the Department of Nautical Studies, Singapore Polytechnic, Singapore, of a set of Automatic Radar Plotting Aids (ARPA) equipment for use by the ASEAN members.

PROJECT BRIEFS

1. Specialized maritime training for personnel required under IMO's International Convention of 1978 for Training, Certification and Watchkeeping, and for Survival at Sea. Training in fire-fighting techniques.

Pursuant to Resolution A.248 adopted by the Assembly of the International Maritime Organization, the Organization convened an International Conference on Training and Certification of Seafarers which was held in London from 14 June to 7 July 1978. The Conference was convened in association with the International Labour Organization. More than 72 maritime countries including all five ASEAN member countries were represented and 12 non-governmental organizations sent observers to the Conference which adopted the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW 1978). The STCW Convention has already been acceded to by the required number of maritime countries and it entered into force on 28 April 1984.

The STCW Convention provides basic rules, regulations and guidelines to be observed in the manning and operation of ships of varying sizes. These include basic principles to be observed in keeping a navigational watch and an engine-room watch; mandatory minimum requirements for certification of masters, mates, chief engineers, second engineer officers and radio officers; mandatory minimum requirements to ensure the continued proficiency and updating of knowledge for masters, deck officers, chief engineers, second engineer officers and radio officers; mandatory minimum requirements for ratings forming part of a navigational watch and an engine-room watch; basic

principles to be observed in keeping a watch in port; mandatory minimum requirements for a watch in port on ships carrying hazardous cargo; and mandatory minimum requirements for certification of radiotelephone operators. These also include special requirements for the manning and operation of tankers such as mandatory minimum requirements for the training and qualifications of masters, officers and ratings of oil tankers, chemical tankers and liquefied gas tankers.

The Convention further outlines the mandatory minimum requirements for the issue of certificates of proficiency in survival craft.

The Convention describes the Conference resolutions and recommendations on principles and operational guidance for navigating and engineer officers in charge of a watch at sea and in port. It also describes basic guidelines and operational guidance relating to safety radio watchkeeping and maintenance for radio officers and radiotelephone operators. It also includes recommendations on training for radio operators and minimum levels of training in maritime safety and radiocommunications; additional training for ratings forming part of a navigational watch; minimum requirements for a rating nominated as the assistant to the engineer officer in charge of the watch; training and qualifications of officers and ratings of oil tankers, chemical tankers and liquefied gas tankers; training for radio officers; training for radiotelephone operators; additional training for masters and chief mates of large ships and of ships with unusual manoeuvring characteristics; radar simulator training; training of seafarers in personal survival techniques and training in the use of collision avoidance aids.

It has been a general consensus that the causes of ship accidents at sea, in most cases, have been mainly attributable to the inadequately trained seafarers who lack the full knowledge of sophisticated navigational equipment and machinery installed today on board ships. The STCW Convention and its training requirements for seafarers therefore very strongly stress importance of the training of ship operating personnel in direct relation to the safety of the ship and its crew.

Accepting the provisions contained in the STCW Convention, ASEAN/COTAC has proposed a programme of specialized training for trainers of ASEAN.

2. Short courses, seminars and study tours on the safety aspects of practical shipbuilding and shiprepair

Maritime safety is a total concept with many and varied aspects. It embraces such diverse aspects as the design and construction of ships, the provision of the requisite equipment for navigation and handling of cargo, the establishment of standards for various levels of personnel manning the ship, the loading, stowage and handling of various kinds of cargoes, the development of procedures and rules for navigating ships through a variety of traffic and climatic conditions, the prevention of collisions at sea through the proper use of equipment and enforcement of ships routeing schemes, and finally the development of procedures for handling emergency situations such as those involving fire and related hazards with a view to preventing or minimizing damage to ships, cargo, crew and passengers.

The International Convention for the Safety of Life at Sea, 1974 (SOLAS 1974) adopted under the aegis of IMO in 1974 and which has been in force since May 1980 and the Protocol of 1978 relating to the SOLAS 1974 (SOLAS PROT 1978) which has also been in force since May 1981, are designed to promote the highest practicable standards of safety necessary for the safe, efficient and economical transport of goods required for international seaborne trade and commerce. The SOLAS 1974 in particular has provisions for the inspection and survey of ships; regulations on construction (subdivision and stability), machinery and electrical installations; regulations on fire protection, fire detection and fire extinction; regulations on life-saving appliances, etc.; regulations on radiotelegraphy and radiotelephony, safety of navigation, carriage of dangerous goods and also regulations on nuclear ships.

The ASEAN Community, as a whole, is now beginning to make good progress in building up its national merchant fleet and its shipbuilding and repair

yards. To make amends for the handicap suffered due to lack of trained technical personnel and national maritime expertise so essential to the maritime industry, the ASEAN has recently embarked on a programme of merchant marine training by establishing new maritime training institutions in its member countries and by updating and upgrading the already existing schools to institutes and academies. The ASEAN programme now includes holding of short courses, seminars and study tours in the safety aspects of practical shipbuilding and shiprepair.

3. Training scheme on patrolling and finger-printing techniques as well as ain areas of remote sensing required for a surveillance programme on discharge of bilge water and ballast

The International Convention for the Prevention of Pollution of the Sea by Oil, 1954 (OILPOL 1954) entered into force in June 1958 and was subsequently amended in 1962 and 1969. Amendments to the Convention was adopted in 1971 further prohibits the discharge of oil in the vicinity of the Great Barrier Reef. The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 related thereto (MARPOL 73/78) has been adopted by International Conferences convened under the aegis of IMO in 1973 and 1978 respectively. Annex 1 of MARPOL 73/78 contains regulations for the prevention of pollution by oil which are more stringent than the OILPOL 1954 Convention. The Convention entered into force on 2 October 1983. The Philippines is the only ASEAN country which as ratified OILPOL 54/69.

The OILPOL 1954 Convention establishes discharge criteria for the discharge into the sea of oil or oily mixture from ships in general and from large oil tankers in particular. In the case of tankers the discharge of oil less than 50 miles from land is prohibited. The Convention allows penalties to be imposed under the law of any of the territories of a Contracting Government in respect of the unlawful discharge from a ship of oil or oily mixture outside the territorial sea of that territory to discourage any such unlawful discharge. Reports of such contraventions are made to the Flag State

with whom responsibility rests for investigating the reported violation and taking action against the Master/Shipowner concerned. Violations due to discharges of oil within territorial waters may be dealt with under the jurisdiction of the coastal State. Under the Convention, every ship which uses oil fuel and every tanker must be provided with an oil record book which must be completed on each occasion whenever any oil transfer or movement takes place. Each page of the book is signed by the officer in charge of the operations concerned. Failure to maintain and update the oil record book constitutes a violation of the Convention. Investigators of the reported violations normally consult the oil record book for evidence that the ship or tanker was, or was not, engaged in the pumping of ballast or bilges at the time of the reported incident.

However, it will be apparent that in many cases, ships having made illicit discharges may only be successfully prosecuted in the event that photographic evidence connects the ship with the oil slick, or the results of chemical analysis indicate that the polluting oil came from the same source as oil carried by the ship. At the present time surveillance and analysis of this kind is virtually limited to the more developed countries.

The above-mentioned sub-projects (3) is included in the ASEAN Integrated Work Programme in Shipping (IWPS) 1982-1986, and is aimed at safeguarding the ASEAN coastlines and waters from pollution by ships.

4. Assistance in organizing a databank on pollutants from ships

The Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL PROT 1973) encourages the training of scientific and technical personnel; the supply of necessary equipment and facilities for reception and monitoring; the facilitation of other measures and arrangements to prevent or mitigate pollution of the marine environment by ships; and research in areas of prevention of mrine pollution and combating.

The ASEAN and its members in Asia and the Pacific region have been following very closely the developments regarding entry into force of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954 (OILPOL 1954) including the amendments adopted in 1962. Since 1976 they have been actively participating in the regional meetings of the ICO/FAC (IPPC)/UNDP International Workshops on Marine Pollution in East Asian Waters, the ICO/WMO Meeting on Marine Pollution (Petroleum) Monitoring Pilot project in the Indian Ocean region held in New Delhi, and the Expert Group Meeting on Marine Pollution held annually in the ASEAN sub-region. A meeting to develop Contingency Plans for the Sulawesi Sea was held in Jakarta, Indonesia, from 7 to 9 January 1980 under the aegis of IMO/UNEP.

The ASEAN Expert Group on Marine Pollution has incorporated in the ASEAN Integrated Work Programme in Shipping (IWPS) 1982-1986, the following projects:

(1) Databank on pollutants from ships.

(2) Training scheme on patrolling and finger-printing techniques, as well as in areas of remote sensing, required for a surveillance programme on discharge of bilge water and ballast.

(3) Training in combating marine oil pollution and conduct of anti-oil pollution operations in ASEAN.

(4) Study group on the establishment of the ASEAN Marine Pollution Control Centre.

The ASEAN Expert Group proposes the setting up of a databank to focus on the collection, distribution and retrieval of scientific data on pollutants of the marine environment emanating from ships.

PART II E OUTPUTS

The project is expected to promote developmental activity amongst members of ASEAN based on maritime safety and protection of the marine environment surrounding the ASEAN Community. The beneficial impact of this project would be the entire Community's co-operation and co-ordination on shipping and operation of its ships resulting in uniformity on training and certification of its merchant marine and subsequently on other sectors of the shipping and shipbuilding industries.

Direct outputs, however, would be availability of trainers for ASEAN with modern and up-to-date training techniques for very specialized subjects in maritime training, in safety aspects of shipbuilding and shiprepairs and in combating marine pollution problems.

PART II F ACTIVITIES

Sub-project 1: Specialized maritime training for trainers (Completed)

The use of modern and up-to-date techniques in training will be a specialized feature for teachers. They will undergo a training programme which will take into account the mandatory requirements for the 1978 STCW Convention on the training of officers and ratings of the merchant marine. Survival at sea and fire-fighting techniques will also be a part of the training programme. The programme may include the following priority subjects which are statutory by various Resolutions of the Convention:

(a) Radar simulator training
(b) Automatic radar plotting aids
(c) Specialized oil, chemical and liquefied gas tankers courses
(d) Dangerous and hazardous cargoes (other than special requirements for oil, chemical and liquefied gas tankers)
(e) Bridge team training and passage planning
(f) Shiphandling simulator
(g) Radio/electronic equipment maintenance
(h) Human relationships
(i) Medical care

The following priority subjects which are not at present statutory may also include:

(j) Electronics
(k) Control engineering and automation
(l) Fuel combustion and plant efficiency
(m) Planned maintenance for machinery installations
(n) Engineering department financial, technical and personnel management.

(i) About 15 man/months individual fellowship training is available. One trainee from each of the five member countries will undergo a specialized training programme for about three months with an advanced training institution. In the limited period of time available, it may only be possible to include some of the aforementioned subjects in the training programme. In the absence of a Project Co-ordinator, the Fellowship Officer of IMO will liaise with the ASEAN/COTAC Secretariat and arrangement for placement of the individual fellowships.

(ii) A set of Automatic Radar Plotting Aids (ARPA) equipment will be procured and installed at the Singapore Polytechnic for the use and training of ASEAN sub-regional programmes, as decided at the 12th Meeting of the ASEAN Committee on Transport and Communications held at Johore Bahru, Malaysia, from 12 to 14 April 1983.

PLEASE NOTE THIS SUB-PROJECT IS NOW COMPLETED.

Sub-project 2: Short courses, seminars and study tours in the safety aspects of practical shipbuilding and shiprepair (Completed)

About 56 man/months of group training together with 1 man/month of consultant's services to assist in the organization of the short courses/seminar is available.

(i) Short Course

Two Fellows from each ASEAN country or a total of 10 Fellows will undergo a five-month specially organized course in the United Kingdom. The objectives of the course will include, as far as practicable:

.1 accident investigation and reporting;
.2 occupational health hazards and precautions;
.3 statutory inspection for cranes and lifting tackle;
.4 safety services and organization;
.5 physical hazards and precautions;
.6 non-destructive testing; and
.7 training methods and techniques.

At the end of the training, the Fellow will be eligible to appear at the examination for Associate Membership of the Institution of Occupational Health and Safety and those who pass the examination will be awarded a 'Safety Officer' certificate; those who do not wish to appear at the examination will only be awarded a Certificate of Attendance.

(ii) Seminar

A seminar of about one week's duration will take place in one of the ASEAN member countries which will host the seminar. Since Singapore has the required facilities, they may wish to host the seminar.

The total number of participants, excluding the experts and consultants, will be limited to 25. The project will, however, pay for international travel expenses and DSA for three participants from each ASEAN member country.

The required experts and consultants will be engaged in the organizing and presentation of documents for the seminar.

(iii) Study Tour

A study tour of about five weeks' duration for one participant from each ASEAN country will be arranged. The Fellows who are selected will be very senior officers from within the Government Ministry concerned with shipbuilding and shiprepair. The five-man group will visit and tour a few countries advanced in shipbuilding and shiprepair. The countries will include the United Kingdom, the Federal Republic of Germany, Norway, the Republic of Korea and Japan.

PLEASE NOTE THIS SUB-PROJECT IS NOW COMPLETED.

Sub-project 3: Training scheme on patrolling and finger-printing techniques as well as in areas of remote sensing required for a surveillance programme on discharge of bilge water and ballast

Activities under this sub-project call for courses on monitoring and surveillance techniques for oprational personnel; and on remote sensing techniques and equipment for marine pollution control administrators. There is a need for laboratory staff to be trained in analytical techniques which can link occurrence of pollution with the source of discharge (i.e., the offending vessel) since many such violations can be pursued under port regulations or national laws in so far as territorial waters are concerned.

(i) Analytical techniques

A short training programme for laboratory staff in analytical techniques will be organized. The LEMIGAS research laboratory in Jakarta, Indonesia, is well equipped for this kind of training and the opportunity to make use of this local facility will be taken.

(To work on training details, LEMIGAS is being contacted. A provision of US$60,000 has been reserved for this training item).

(ii) Remote sensing and surveillance

One set of basic and important equipment of Side Looking Airborne Radar (SLAR) will be procured for use by the ASEAN. It will provide all-weather surveillance capability over large areas and is capable of detecting oil spills as small as 100 litres. The system permits presentation on a video monitor and recording on to video tape with position co-ordinates, time and date superimposed on the video. Any radio communications with an offending vessel can also be recorded.

The equipment will be installed on an aircraft for use by the ASEAN members; and following the decision reached by the ASEAN members at the 8th Meeting of the ASEAN Sub-Committee on Shipping and Ports, held from 3 to 4 January 1986 in Bangkok, Thailand, the SLAR equipment is to be located in Malaysia.

During this meeting, an IMO Consultant on Remote Sensing and Surveillance provided an overview of the SLAR system; and it was suggested by the ASEAN members that the IMO Consultant should visit Malaysia to discuss the capabilities, possibilities and maintenance aspects of SLAR equipment; and prepare an equipment package accordingly. The mission was subsequently undertaken from 14 to 21 March 1986.

The SLAR package is at an estimated cost of around US$255,000 and is outlined on page 19 under UNDP/IMO Inputs. The manufacturer will be requested to install and demonstrate the use of equipment.

Sub-project 4: (i) Assistance in organizing a databank on pollutants from ships

A computer databank could be put to use for various purposes. It could be used, for example, (a) for storage of data on pollution hazards of various substances and information on techniques and equipment for spill countermeasures; (b) for storage of environmental baseline data for future pollution damage analysis; (c) for storage of shipping statistics (volume and

type of traffic) and record of accidents and actual spillages (quantity and type of substances involved, e.g., crude oil, product oil, chemicals, etc.); and (d) spill projectory forecasting for selected areas. If required, it could also be used for a combination of two or more of the above purposes.

Referring to the former, example (a), the storage and retrieval of basic information (physical and chemical characteristics of pollutants and standard measures of treatment), the data should be available anywhere in the sub-region on a real time basis. It involves problems with communication facilities and distribution terminals. The compilation of reference files in major ports as well as additing other variables such as prevailing wind and current, coastal and offshore resources to be protected, facilities available within certain time limits, etc., would prove most advantageous permitting *necessary funds required.*

Example (b) above would require sub-regional co-operation with emphasis on the environmental aspects and is directly related to a project on scientific support for continuing plans included in the Action Plan of the UNEP Regional Seas Programme and scheduled for implementation in 1983 with Indonesia selected as lead country.

Example (c) above would be available in identifying high risk areas, preparing contingency plans and in locating response capabilities. However, this is the best example of difficulties in obtaining the raw data.

The foregoing assessment indicates that a feasibility study is most necessary prior to any decision taken in the establishment of the data.

Under this activity, therefore, a consultant or team of consultants will undertake a fact-finding mission to the countries of the ASEAN region to ascertain the requirements of Governments with respect to the establishment of a computerized databank which would facilitate the exercise of functions at the national and international level for the prevention and control of pollution from ships. The Consultant will draw upon his own knowledge and

experience in drawing attention to the various possibilities that exist for central storage of data with access through terminals located throughout the region; such possibilities include, but need not be limited to:

(a) Data on pollutants carried by ships, e.g.:
- properties of crude oils determining their behaviour when discharged into the marine environment;
- characteristics of other hazardous substances carried by ship, e.g. aquatic toxicity, bioaccummulation, degradability;
- information on response procedures in case of spillage.

(b) Data on anti-pollution resources, e.g.:
- inventories of equipment, aircraft and vessels which are available for spill surveillance and response;
- listings of experts and organizations specializing in the marine pollution field.

(c) Storage of shipping statistics (volume and type of traffic) and records of accidents and spillages.

(d) Data on dangerous cargoes, e.g., International Maritime Dangerous Goods Code.

(e) Data on substandard tankers derived, for example, from the exercise of port State control procedures called for by SOLAS and MARPOL Conventions.

(f) Data in support of vessel traffic control systems; such systems would most probably relate to the passage of vessels through exceptionally hazardous areas, e.g., Malacca Straits, but could ultimately form part of an integrated vessel traffic service.

In preparation for the mission described above, the Consultant will visit the EEC Commission in Brussels to gain first-hand knowledge of databanks being developed for a similar purpose in Europe, including that of the European

Ports Data Handling Association (EVHA) and the COST 301 Project on the feasibility of establishing an integrated vessel traffic service to reduce the incidence of accidents. The Consultant will also visit the Secretariat of the Paris Memorandum on Port State Control of Shipping in The Hague, Netherlands, to obtain an insight into data exchange procedures following in this regard.

Prior to commencing the mission described above, the Consultant will prepare a summary review of European activities in this field which will be submitted to ASEAN Member Governments as background material for his visits.

On completion of the fact-finding mission, the Consultant will prepare a report on the outcome of discussions with Governments on the subject matter described above; in particular, he will endeavour to reach a conclusion on the (majority) view of the ASEAN countries on the subject matter(s) for which there is a perceived need for the support of a centralized databank.

In the event of a positive conclusion being reached, the Consultant will include in his report a summary outline of the data-gathering exercise and computer system/communications network which would be required to enable the appropriate follow-up action to be taken by the ASEAN Member Governments.

(ii) Meeting of ASEAN Government Experts on the Databank

Following the first Consultant's fact-finding mission and after his report has been distributed to the ASEAN members, a meeting of the ASEAN Government Experts will be organized in the sub-region.

The meeting will consider the Consultant's reports and other relevant matters and make recommendations on various issues involved in the project implementation. These recommendations will be proposed for acceptance by the UNDP/COTAC in the establishment of the databank.

The meeting will last approximately two working days and will be represented by a leading member from each of the five ASEAN countries, UNDP and IMO. The meeting's venue will be announced in due course. International travel expenses and DSA for the representatives will be borne by the project.

(iii) Other activities under this sub-project

Following the recommendations of the Expert's meeting, it is envisaged that the main component would be the procurement of a computer (or hiring on a part-time basis, if available), processor terminals and accessories and softwares such as magnetic tapes, cassettes, floppy disks or diskettes. The output could be provided as a computer print-out or microfiche.

Short-term training for the operators of the computer/processors will be required. Further consultants services may or may not be required.

(iv) Southeast Asian Agency for Regional Transport and Communiations Development (SEATAC) Terminal link-up to the COTAC mainframe computer

Acting as Executing Agency on behalf of the ASEAN/COTAC, SEATAC has established a very close working relationship with the COTAC. SEATAC is strongly committee to enhancing shipping and transportation facilities in the ASEAN sub-region for which the ASEAN/COTAC gives, amongst others, a priority. The development of a maritime databank for the sub-region has therefore become a subject of mutual importance between the two Organizations.

At the request of SEATAC and IMO, the Chairman of the COTAC, and the UNDP/RBAP have agreed on the linking up and sharing of the main frame computer which is envisaged under the UNDP financed Project RAS/81/055 "Assistance in organizing a databank on pollution from ships."

PART II G INPUTS

(a) Government Inputs

On behalf of its member governments, ASEAN will co-operate and co-ordinate with UNDP and IMO on all project activities.

The ASEAN member governments will render full assistance to project experts and personnel when they are carrying out their respective functions in the countries.

Each ASEAN member government will nominate a national fellow or fellows required for the training programmes outlined in Section F.

(b) UNDP/IMO Inputs

UNDP will provide the required finance for the appointment of experts and training of fellows and procurement of equipment as follows:

Sub-project 1: (Completed)	Specialized Maritime Training	Timing Schedule
	(i) 3 months specialized training for 5 fellows	(January-March 1983)
	(ii) ARPA training equipment	1983
Sub-project 2: (Completed)	Short Courses, Seminars and Study Tours	Timing Schedule
	(i) Short course: 10 fellows x 5 months Safety Officer's Certificate Course	end 1983/84
	(ii) Seminar: 15 fellows x 1 week seminar in one ASEAN country	1984
	(iii) 4 weeks consultant's assistance in (ii) above	1984
	(iv) 5 fellows x 5 weeks study tour	1984
Sub-project 3:	Training Scheme on Patrolling, Finger-printing and Remote Sensing	Timing Schedule
	(i) Analytical (3 to 6 m/m) training course Estimated cost: US$60,000	1986
	(ii) 4 weeks consultants services Estimated cost: US$10,000	1986

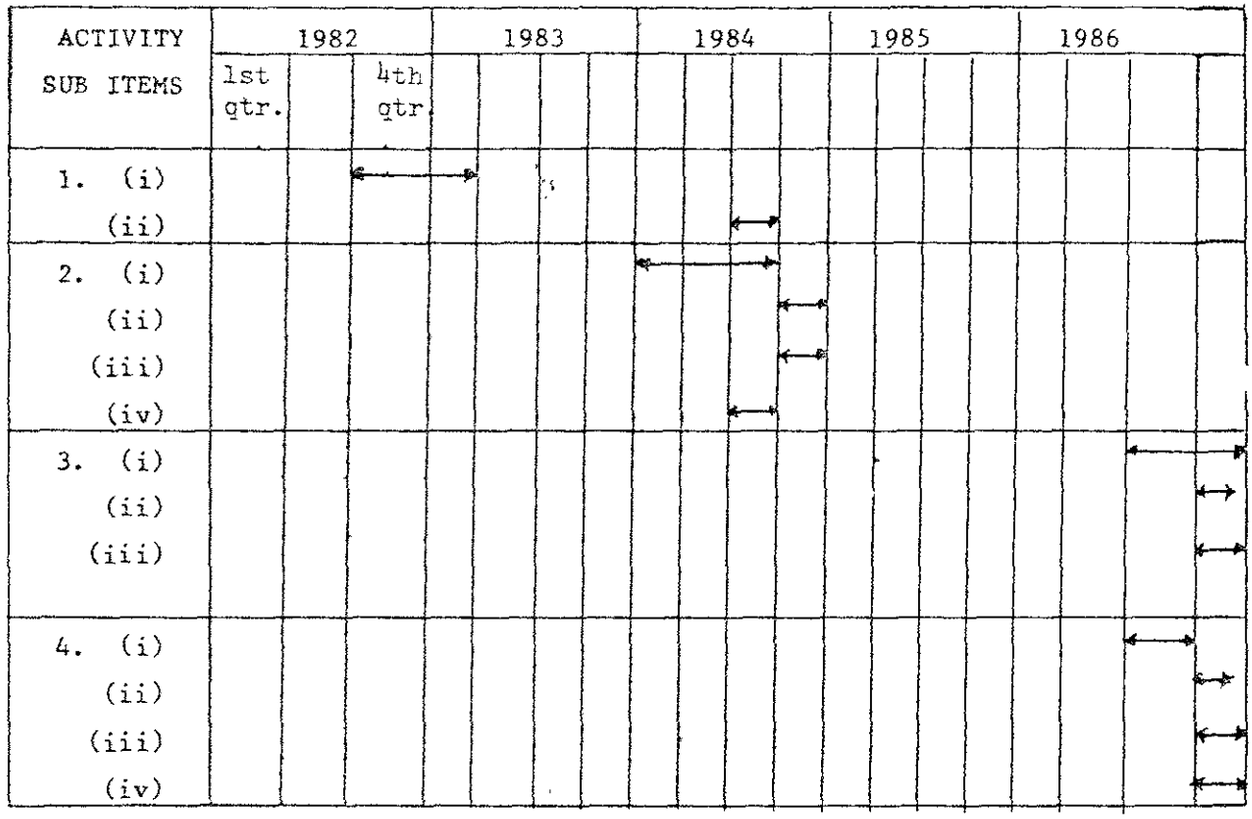
Estimated cost: US$255,000

(iii) Procurement and installation of Side Looking Airborne Radar Surveillance Equipment (SLAR) package comprising: — 1986

- A standard SLAR system vertical polarization, with digital and/or video recording, icluding recorder (video or digital);
- Display monitor, data annotation and two 12-ft. antenna
- A global navigation system (GNS) LTN 3000 or Collins LNR 70;
- Interface programme for interchange GNS/INS;
- One hand-held camera with Dutch annotation (data, time), with 35-105 mm. zoom;
- One low light level TV system for identification, day and night, connected to monitor;
- One polaroid camera (CU-5) to photograph monitor (SLAR, etc.);
- One VHF maritime RS 8000;
- All manufactures and local installation costs in Malaysia included;
- One week on-site technical and operational training included one week in Malaysia;

Sub-project 4:	Databank on Pollution	Timing Schedule
	(i) 8-week fact-finding consultancy Estimated cost: US$30,000	1986
	(ii) 3-day review meeting of ASEAN members to discuss Consultant's report Estimated cost: US$20,000	1986
	(iii) Procurement and installation of a computer with suitable hardware/software Estimated cost: US$95,000	1986
	(iv) Training of computer operacors Estimated cost: US$15,000	1986

PART II H PREPARATION OF WORK PLAN



The bar chart shows scheduled activities within the framework of the work plan. Actual dates of each activity will be transmitted by IMO well before each event. Depending on the actual date of commencement of the project activities, they may well be extended in to 1987.

PART II I DEVELOPMENT SUPPORT COMMUNICATIONS

To ensure an effective contribution of the project to the development of the maritime transport sector, it is considered of great importance that liaison is established with the Maritime Authority in eac ASEAN member country responsible for the implementation of this project, at an early stage of the project implementation.

PART II J INSTITUTIONAL FRAMEWORK

The ASEAN/COTAC Secretariat has the overall responsibility for co-ordinating project activities amongst its members.

Focal points within ASEAN/COTAC and IMO will be established and liaison will be maintained with UNDP Field Offices.

PART II K PRIOR OBLIGATIONS AND PREREQUISITES

All ASEAN/COTAC member countries will participate in this UNDP financed project.

ASEAN/COTAC or a member country will host the project expert or experts as deemed necessary during part or parts of the project period and will offer office accommodation, secretarial servics, cable and mail facilities required for the activities of the experts. Local transportation will also be provided.

The host government or governments will need to ensure that the necessary provision for the above-mentioned facilities has been made.

ASEAN/COTAC or its member countries will select and release national staff for the training envisaged under the project. As far as possible, the personnel should be earmarked well in advance of the implementation of the training programme.

PART II L FUTURE UNDP ASSISTANCE

Future assistance to this project will be reviewed and its continuation considered by UNDP and COTAC prior to the expiry of the ICP Cycle 1982-1986.

This project revision has been designed to subtantially implement activities for sub-projects for which the decisions were reached at the 12th and 13th COTAC meetings held at Johore Bahru, Malaysia in April 1983 and in Kuala Lumpur, Malaysia in April 1984 respectively.

PART III SCHEDULES ON MONITORING, EVALUATION AND REPORTS

PART III A TECHNICAL REVIEWS

- UNDP and IMO will hold annual reviews in accordance with the policies and procedures established by UNDP.

- Assignment reports of the experts (and fellows) will be forwarded to:

(i) the ASEAN/COTAC Secretariat;
(ii) the Regional Office of UNDP;
(iii) the UNDP Field Office in the country concerned;
(iv) IMO Headquarters.

PART III B EVALUATION

A mid-term review will be undertaken jointly by UNDP and IMO, at a mid-point during the tenure of the project.

PART III C PROGRESS AND TERMINAL REPORTS

The usual six-monthly work progress report is not applicable in the absence of the project experts. However, the consultant's and fellowship reports will be available.

The terminal report will be prepared by the Executing Agency, IMO, for consideration at the final review meeting.

PROJECT BUDGET COVERING UNDP CONTRIBUTION
(in US Dollars)

Country : Governments of ASEAN Countries
Project Number : RAS/81/055/F/01/19
Project Title : Support to Maritime Sector ASEAN

		TOTAL		1982		1983		1984		1985		1986	
		p/m	$	p/m	$	p/m	$	p/m	$	p/m	$	p/m	$
10.	PROJECT PERSONNEL												
11	Experts												
11-01	Consultant Shipbuilding and Repair	0.8	7,535					0.8	7,535				
11-02	Consultant in Databank	2.0	30,000									2.0	30,000
11-03	Consul. Remote Sensing & Surveillance	1.0	10,000									1.0	10,000
11-99	Sub-Total	3.8	47,535	0.0	0	0.0	0	0.8	7,535	0.0	0	3.0	40,000
16	Other Costs		3,000										3,000
18	Adjustments against Prior Year(s)		19								19		
19	Component Total		50,554		0		0		7,535		19		43,000
20.	SUB-CONTRACTS												
21			0										
22			0										
28	Adjustments against Prior Year(s)		0										
29	Component Total		0		0		0		0		0		0
30.	TRAINING												
31	Individual Fellowships		287,429		37,026				190,403				60,000
32	Group Training		31,632						11,539		93		20,000
33	In-Service Training		15,000										15,000
38	Adjustments against Prior Year(s)		(4,522)				(4,522)						
39	Component Total		329,539		37,026		(4,522)		201,942		93		95,000

PROJECT BUDGET COVERING UNDP CONTRIBUTION
(in US Dollars)

Country : Governments of ASEAN Countries
Project Number : RAS/81/055/F/01/19
Project Title : Support to Maritime Sector ASEAN

		TOTAL		1982		1983		1984		1985		1986	
		p/m	$	p/m	$	p/m	$	p/m	$	p/m	$	p/m	$
40.	EQUIPMENT												
41	Expendable Equipment		395,478						45,478				350,000
42	Non-Expendable Equipment		0										
48	Adjustments against Prior Year(s)		0										
49	Component Total		395,478		0		0		45,478		0		350,000
50.	MISCELLANEOUS												
51	Operation & Maintenance of Equipment		0										
52	Reporting Costs		0										
53	Sundry		2,971		184		285		451		51		2,000
58	Adjustments against Prior Year(s)		0										
59	Component Total		2,971		184		285		451		51		2,000
99.	Project Total		778,542		37,210		(4,237)		255,406		163		490,000
100.	PROJECT COST-SHARING												
101	Government Cost-Sharing		0										
102	Government Cost-Sharing		0										
103	Third-Party Cost Sharing		0										
109	Component Total		0		0		0		0		0		0
999.	UNDP Total Contribution		778,542		37,210		(4,237)		255,406		163		490,000