

PROJECT DOCUMENT
THE PROJECT ON
PHILIPPINE COAST GUARD
HUMAN RESOURCE DEVELOPMENT

March 2002

PHILIPPINE COAST GUARD (PCG)
&
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Acronyms

ATON	Aids to Navigation
BFAR	Bureau of Fisheries and Aquatic Resources
BOC	Bureau of Custom
CGAC	Coast Guard Action Center
CGETC	Coast Guard Education and Training Command
CGTC	Coast Guard Training Center
DBM	Department of Budget and Management
DND	Department of National Defense
DOTC	Department of Transportation and Communications
EEZ	Exclusive Economic Zone
GAA	General Appropriation Act
GAD	Gender and Development Plan
M & E	Monitoring and Evaluation
MAREP	Marine Environmental Protection
MARLEN	Maritime Law Enforcement
MAROP	Maritime Operations
MARPOL	Marine Pollution Prevention
MASAD	Maritime Safety Administration
MARINA	Maritime Industry Authority
MARSAF	Maritime Safety
MSIP	Maritime Safety Improvement Project
MTPDP	Medium-Term Philippine Development Plan
NARMIA	National Mapping and Resource Information Agency
NEDA	National Economy and Development Authority
NMP	National Marine Policy
NOCOP	National Operation Center for Oil Pollution
OSC	Oil Spill Combating
PCG	Philippine Coast Guard
PCM	Project Cycle Management
PDM	Project Design Matrix
PMMA	Philippine Merchant Marine Academy
PO	Plan of Operation
PPA	Philippine Ports Authority
SAR	Search and Rescue
SOLAS	International Convention for the Safety of Life at Sea
UNCLOS	United Nation Convention on the Law of the Sea

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Chapter 1. Introduction

1. Background of the Project Finding

As an archipelago, the Philippines rely on maritime transportation system for basic passenger transport as well as for cargo transport. As such, maritime transportation is one of the key industries directly related to the fisheries and tourism, frequency of maritime incidents has been one of serious issues of the country. Furthermore, fishery resources provide the essential daily protein source for all Filipinos; therefore the Government has been concerned about maritime security and safety with consideration of its impact on the economy and health of the people. Ratification of the *'United Nations Convention on the Law of the Sea (UNCLOS)'* (ratified in 1984) gave the Government broader responsibilities for maritime safety and security, since UNCLOS sets yet transcends international boundaries by setting forth basic responsibilities of nations for development of offshore resources and their preservation. There is pressing need to strengthen organizational capability and to develop personnel in PCG who is a comprehensive maritime policy-implementing agency, in order to cope with frequent maritime incidents for its prevention and reduction. Increased marine pollution, piracy and smuggling cases reported by neighboring countries urgently call for the enhancement of law to ensure maritime security at all times, as in the case of Japan who has more than 90% of crude oil transported through offshore of the Philippines.

Driven by necessity to collaborate with maritime agencies in East Asian countries, Japan has committed in various ways to do its share in providing assistance to the sector. The ongoing technical cooperation is;

1) Dispatch of 1 expert to PCG for *'Maritime Search and Rescue Operation and Marine Pollution Prevention'*, 2) Dispatch of 2 experts to MARINA for *'Ship Inspection Techniques'*, 3) Dispatch of 1 expert to MARINA for *'Maritime Administration'*, and 4) Dispatch of 2 experts to NAMRIA for *'Electronic Navigational Chart 1'*.

2. Reason for the *'Project on Philippine Coast Guard Human Resource Development'*.

As a State Party to the *'International Convention for the Safety of Life at Sea (SOLAS) of 1960'*, (ratified in 1974) the Government created PCG in 1967 under DND to integrate diverse functions for maritime safety administration and dedicate its existence to the enforcement of the provisions of the SOLAS. After the ratification of the SOLAS, PCG was transferred from DND to DOTC in 1998 in order to strengthen the coordination, implementation and enforcement of maritime transport safety policies and regulations, the Philippine government has recognized that institutional capability building and human resource development in PCG is an urgent and a must for this maritime agency to fulfill its mandate of *'Saving life and property at sea'* and *'preservation of marine environment'*.

In March 2001, PCG has completed the construction of its new training building, namely Coast Guard Training Center (upgraded to a major command effective September 2001, and renamed Coast Guard Education and Training Command; 'CGETC') so as to enhance the capability of PCG personnel through education and training. However, CGETC has not fully developed its potential for education due to insufficient equipment, outdated curriculum and lack of standard textbooks. There is now urgent need for

CGETC to improve in terms of facilities and faculty. The JICA Study Team has conducted the examination and appraisal of “*the Project on Philippine Coast Guard Human Resource Development*” (hereinafter referred to as ‘the Project’) since August in 2001, focusing on the current situation and national policy of the sector, and of equipment use procured through Japanese experts dispatch. Institutional sustainability of PCG was also examined to clarify the benefits of the Project, i.e. enhancement of PCG performance capability in the fields of SAR, ATON, MARPOL & OSC and MARLEN, and expected great positive impact not only on all Filipinos but also on the neighboring countries including Japan has been appraised.

Chapter 2. Background of the Project

2.1 Socio-economic Context

1. Social Context

In 2001, the Country has 73 provinces and 61 autonomous districts, which are classified into 16 population distributive regions. Population in 2000 is reported at 75,331,000 and annual population growth rate in the past 5 years from 1995 is estimated at 1.2 %. The population growth rate of the national capital region in Luzon is outstandingly high.

Population of the Philippines

Regions	Area (Sq. km)	Population (persons)			Density (population/ sq. km)		
		1990	1995	2000	1990	1995	2000
Whole Nation	294,554	62,251,868	70,809,003	75,331,000	211.3	240.4	255.7
National Capital Region	636.0	7,948,392	9,454,040	10,492,000	12,497.5	14,864.8	16,496.9

Source: National Statistics Office, ‘2000 Philippine Statistical Yearbook’

2. Education System

Primary education is compulsory for children of age 6 to 12, secondary education for age of 12 to 16, and higher education for students with ages of 17 and more. Primary schools are reported at 39,312 with 1,268 million school children, 93% of them go to public schools. There are 7,128 secondary schools with 517 million students; the 76% go to public schools. Institutions for higher education are estimated at 271 national universities and 1,045 private, with 222 million students. 4 to 5 years’ education is required for a Bachelor Degree; units obtained in the 5 years are estimated 210. (Philippine Statistical Yearbook 2000)

3. Economic Context

The following shows the National budget of the Philippines.

Topic	Flow of National Budget (Unit: 1,000pesos)		
	1999 Actual	2000 Actual	2001 Planned
Total amount for departments	348,192,343	350,698,165	374,919,617
Special sector program	232,192,677	298,785,835	350,080,383
Total	580,385,020	649,484,000	725,000,000

Source: ‘National Expenditure Program FY2001’

Since the 1990s, the Government has been driving the economic adjustment through customs reduction and non-tariff wall removal so as to promote economic growth. There was a sudden drop in growth rate to -0.58% in 1998 due to Asian economic crisis and recovery to +3.38% was seen the following year.

GDP Growth Rate in the past 5 years

Topic	1996	1997	1998	1999	2000
GDP growth rate	+5.8%	+5.2%	-0.58%	+3.38%	+4.0%

Source: '2000 Philippine Statistical Yearbook', National Statistical Coordination Board

Regarding GDP by sector, the service sector was at 45.59% in 1999, while contribution of fisheries included in the sector for agriculture/forest/fisheries account for 3.9%, which is estimated at 34 billions pesos in 1998. Fisheries labor population has accounted comparatively high at 5% of total labor force.

Flow of GDP by Sector (at current cost: 1985, unit: million pesos)

Sector	1994	1995	1996	1997	1998	1999	% of 1999
Agriculture/Forestry/Fisheries	171,390	172,848	179,451	185,004	173,106	183,407	19.99%
Industries	265,972	283,858	302,126	320,689	313,881	316,650	34.51%
Service	329,006	345,518	367,544	387,458	400,918	417,325	45.49%
Gross Domestic Product	766,368	802,224	849,121	893,151	887,905	917,382	100%

Source: '2000 Philippine Statistical Yearbook', National Statistical Coordination Board

2.2 Description of the Sector

1. The Philippine Sea Area and Marine Resources

The Philippines is an archipelago with some 7,100 islands having its coastline extension of 36,289 kilometers that is 1.2 times that of the Japanese coastline; total sea including EEZ proclaimed reaches to over 2.2 million kilometers (BFAR). The Philippines has various mangrove swamps that are sources of fuel, charcoal and raw materials for nylon manufacture and papers. The mangrove swamps serve as fertile ground for breeding and nurseries, the Mari culture is estimated at 670,000 MT in 1996 with production distribution of oyster, mussels and seaweeds. Commercial fisheries production in 1998 is about 940,533MT (BFAR). Furthermore, there are abundant mineral resources around coastal zones and continental shelf, and coral reefs reach over 27 thousand square kilometers, which serve as tourism resources.

Marine Resources of the Philippines (Unit: sq. km)

1. Total Marine Territorial Water Area Including the EEZ	2,200,000
a. Coastal	266,000
b. Oceanic	1,934,000
2. Shelf Area (to depth 200m)	184,600
3. Coral Reef Area	27,000

Source: PCG 'PCG Marine Environmental Protection Master Plan'

Fisheries Production of 1996		(Unit: MT)
Mari culture (Oyster, Mussel, and Seaweeds)		671,038
Commercial fisheries production		940,533

Source: PCG '*PCG Marine Environmental Protection Master Plan*'

2. Vessels, Passengers and Cargos

In the archipelago, there is high reliance on water transportation because of insufficient inland infrastructure and congested short-haul transportation routes network. They derive from main harbor such as Manila, Cebu and Davao so on and run over the whole nation. There are 310 in the archipelago, and some 10,000 domestic and oversea merchant fleets per day navigate within the offshore.

Trend of the Number of Passengers and Calling Vessels from 1994 to 1999

Topic	1994	1995	1996	1997	1998	1999
Total No of Passengers	40,444,607	44,303,618	48,326,648	521,126,036	55,873,389	55,401,174
Disembarked	19,999,795	21,970,721	23,490,269	26,973,781	28,800,824	28,334,200
Embarked	20,444,812	22,332,897	24,836,379	25,152,255	27,072,565	27,066,974
Total No of Vessels	218,520	237,488	274,229	338,984	364,443	364,443
Foreign line vessels	8,917	9,636	10,671	11,419	11,378	11,378
Domestic line vessels	209,603	227,852	263,558	327,565	353,065	353,065

Source: *Data Book 2001: Domestic Shipping Industry in the Philippines*, MARINA, p56; Source, PPA & CPA Statistics

In 1999, calling vessels account for more than 360 thousands, total number of passengers are estimated at **55.4 millions**, and total volume of handling cargo eventually runs to 162.76 million MT. The Country has about 400 thousands seamen's vessel running along the coastline. Numbers of fleets and handling cargo have been increasing for these six years.

Trend of Cargo throughout All Port from 1994 to 1999 (Unit: 1,000 MT)

Topic	1994	1995	1996	1997	1998	1999
Total Cargo handling	123,911,071	137,470,433	150,244,653	162,604,442	156,173,189	162,756,822
Foreign Cargo	52,802,679	60,762,614	69,091,994	73,210,839	66,778,586	69,435,392
Import	38,221,599	43,371,391	52,837,394	49,656,084	49,656,084	51,914,270
Export	14,581,080	17,391,220	16,254,600	17,122,502	17,122,502	17,521,124
Domestic Cargo	71,108,392	76,707,819	81,152,659	893,393,603	89,393,603	93,321,428
Incoming	36,568,811	39,693,287	41,738,162	45,209,807	45,209,807	47,751,792
Outgoing	34,539,581	37,014,532	39,414,497	44,183,796	44,183,796	45,596,936

Source: '*Data Book 2001: Domestic Shipping Industry in the Philippines*', MARINA, p54; Source, PPA Statistic

3. Volume of Merchant Fleet

Compared with neighboring states namely the Indonesia and the Malaysia, it is shown that outstanding volume of merchant fleet and importance of water transport for the Philippines. Concerning proportion (%) of the volume, Japan is the seventh-ranking country and the Philippine stands thirteenth in 1999.

Number and Volume of Merchant Fleet in the World 1999

Country	Number of Fleet	1,000 GRT	Proportion (%)
Whole World	86,817	543.610	100.0
Philippines	1,897	7,650	1.4
Indonesia	2,369	3,241	0.6
Malaysia	828	5,245	1.0
Japan	8,462	17,063	3.1

Source: Department of Land, Infrastructure and Transport, Japan 'Overseas Transport Statistics 2000'

4. Maritime incidents and Crimes in the Philippine Sea area

Two following tables show summaries of maritime incidents and crimes in the Philippine Sea area. To implement measures for mitigation, prevention, and responses to deal with those incidents and cases is the important duties in PCG functions.

Maritime incidents and Pollution incidents at the Philippine Sea area from 1998 to 2001

Topic	1998	1999	2000	*2001 September
Maritime incidents*	210	263	161	61
Pollution incidents**	9	14	29	15

Source: PCG statistics*, PCG Action Center, November 2001

Note: *Maritime incidents: Aground, Sunk, Collision, Caught fire, Capsized, Missing, Drifted and engine trouble, Flooding, Rammed, etc

**Pollution incidents: Oil spilling, chemical products leak, illegal dumping, etc

The following table indicates that missing person and casualties on average per maritime incident at the Philippine sea area is ten times more than those of Japan, it shows that ratio of PCG SAR mission is quite low in comparison with Japan Coast Guard (JCG).

Missing person and Casualties per Maritime incident by the Philippines and Japan

Country	1996	1997	1998	1999	2000	2001	Average
Philippines	1.01	1.15	1.60	1.33	1.80	1.54	1.15
Japan	0.17	0.17	0.15	0.14	n.a.	n.a.	0.10

Source: 'Maritime Incident Report', Coast Guard Action Center, 2001, JCG, 'Maritime Incident Report', 2001

Inadequate security is recognized that case of piracy and armed robbery on average is reported thirteen times more, and smuggling case is almost twice more than those of Japan in the past four years, as shown in the following table. It is noted that smuggling inbound into the Japanese Sea area have been increased.

Number of Piracy and Armed robbery cases by the Philippines and Japan

Country	1998	1999	2000	2001	Average
Philippines	116	72	96	88	93
Japan*	4	5	12	n.a.	7

Source: PCG statistics, Coast Guard Action Center, 2001, JCG ‘Statistics of maritime crimes’

Note: *All of cases here of Japan mean ‘armed robbery cases’

Number of Smuggling* cases by the Philippines and Japan

Country	1998	1999	2000	2001	Average
Philippines	1,108	417	356	346	557
Japan	376	416	50	n.a.	280

Source: PCG statistics, Coast Guard Action Center, 2001, JCG ‘Statistics of maritime crimes’

Note: *Smuggling: drug, small arms, illegal logged timber, human entry, etc.

2.3 Overall National Programs and National Policy of the Philippines

1. Overall National Program; ‘Medium-Term Philippine Development Plan 1999-2004: MTPDP’

National development policy for maritime safety administration as well as water transportation administration is indicated in the Chapter 5 of MTPDP, ‘Infrastructure Development III Strategies Transportation’ wherein responsibility of PCG as the maritime safety agency is stressed.

Since 1990s the Government has committed the deregulation and liberalization for the water transport to promote private sector through introduction of domestic ferry or luxury passenger linear. Consequently, the policy of liberalization increased supply in water transportation and called for more concerns for maritime safety and security, the Government formulated and conducted a series of ‘Maritime Safety Improvement Project: MSIP’. Furthermore, the government formulates a maritime safety action program especially for domestic vessels through ‘National Safety Management Code’.

2. Related International Conventions and Agreements ratified by the Philippine Governments

United Nations Convention on the Law of the Sea (UNCLOS) of 1960

The International Oil Pollution Compensation (IOPC) Fund Convention of 1992 (FUND 92)

The INMARSAT Convention of 1976

The INMARSAT Operating Agreement of 1976

The Safety of Life at Sea Convention of 1974 (SOLAS)

MARPOL 73/78 Convention

The London Dumping Convention of 1972 (LC)

The Special Transport of Passengers Agreement of 1971

The Civil Liability Convention of 1969 (CLC 69)

The Tonnage Convention of 1969

The Load Lines Convention of 1966

IMO Convention of 1948

Source: PCG document

3. National Policy for the Sector

The Philippines adopts the following national policy:

- 1) Emphasize the archipelago's nature of the Philippines in development planning
- 2) View coastal marine areas as a locus of community, ecology and resources;
- 3) Implement UNCLOS within the framework of the '*National Marine Policy (NMP)*'

NMP calls for urgent development and mobilization of marine resources to achieve economic growth.

- 4) Coordinate and consult with concerned and affected sectors thorough the Cabinet Committee on Maritime and Ocean affairs; and
- 5) Address the following priority concerns;
 - a) Maintenance of the national territory, b) Protection of the marine ecology, c) Management of the Marine economy and technology and d) Maritime security.

Based on the above-mentioned national policies, the administrative capability building and human resource development of the maritime agencies including other governmental and private organization are considered as priority area for strengthening maritime sector.

4. Internal Master Plans of PCG

In order to enhance the performance and organizational capability, PCG has made internal development plan and three master plans as follows:

- 1) '*Master Plan on the Development of Maritime Safety*'
- 2) '*PCG Marine Environmental Protection Master Plan*'
- 3) '*PCG Communication System Master Plan 2001*'
- 4) '*Philippine Coast Guard 15 years development plan*'

All of above master plans are formulated based on the functions of PCG, i.e., Maritime Search and Rescue (MARSAR), Marine Environmental Protection (MAREP), Maritime Law Enforcement (MARLEN), Maritime Operations (MAROP) and Maritime Safety Administration (MARSAD) to address the concerns of the national policy of the Government including NMP.

See Chapter 3-3.1.3 *Functions and Duties of PCG*

2.4 Priors and Ongoing Assistance in the Sector

1. Aids Trends and the Policy of the Philippine Government

Since 1991 the Government has been conducting a series of '*Maritime Safety Improvement Project (MSIP)*' for the purpose of maritime incident reduction and law enforcement enhancement.

Ongoing Projects assisted by Foreign Donors

Donor	Executing/ Recipient	Name	Project Site	Description	Period	Cost (Pesos)
JBIC	DOTC/ PCG	MSIPC	Cebu etc	Procurement of 2 buoy tender vessels	2000 -2004	2,470 millions
Spain	DOTC/ PCG	MSIP III	Visayas & Mindanao	Rehabilitation lighthouse and construction of new lighthouses	2001 -2002	684 millions

Source: NEDA, September of 2001

Construction of new CGETC building and procurement of some existing equipment were implemented with '*Technology Transfer Fund*', which was a part of SAR project assisted by Australia. The provision of said fund was utilized for the training of PCG personnel, and the savings generated by reduction of trainees enabled to realize the construction of facility of Farola Compound in Manila and procurement of a part of current existing equipment there ('Project Completion Report' SAR project team).

Completed Project assisted by Foreign Donors

Donor	Executing/ Recipient	Name	Project Site	Description	Period	Cost (Pesos)
Australia	DOTC / PCG	SAR*	Manila, Cebu	Acquisition of 2 search and rescue vessel, training etc	1998 -2000	158 millions
OECF (JBIC)	DOTC / PCG	MSIP B	Luzon Visayas	Rehabilitation lighthouse and construction of new lighthouses	1996 -2001	1,434 millions
OECF (JBIC)	MARINA/ PCG	MSIP I	Manila- Cebu route	Civil works of 37 lighthouses, Supply of spare parts etc	1991 -1996	836 millions
UK	DOTC / PCG	MSIP II	Nationwide	Lighthouses establishment, procurement of buoy etc	1993 -1996	784 millions

Source: NEDA, September of 2001, Note: *SAR: Search and Rescue Project

2.Necessity of Japan's Cooperation

It is noted that all of above-mentioned ongoing and completed projects are hardware assistances and among them there is no assistance aiming the improvement of human resource development system through technology transfer focusing on CGETC. It is stressed that '*the Project on Philippine Coast Guard Human Resource Development*' will be the first project with the purpose of faculty building of PCG personnel through enhancement of education and training management system of CGETC.

The Project has no duplication with other ongoing projects, and instead, it is evidently recognized that the hardware (infrastructure) improvement of the other projects and software (technology) improvement by *this Project* will be complementary to each other for great enhancement of PCG performance capability of their functions for maritime security, safety and environmental preservation.

At CGETC, essential and fundamental education and training is offered to PCG personnel in the fields of SAR, ATON, MARPOL, OSC and MARLEN, which are important functions of PCG. Specific technical cooperation of *the Project* will be curriculum update and development, textbooks development, course designing and procurement of equipment necessary for education and training at CGETC. Adequate capacity building through *the Project* will enable PCG to develop capable human resource from enlisted personnel and officers including leaders. Moreover, the Project will help the other governmental and private organization of the sector to develop personnel in-charge of the sector through seminars offered by CGETC.

Since the Project will assist the Philippine's overall national program MTPDP, national policy NMP, the implementation of the ratified international conventions and agreement, and internal master plans of PCG, necessity and relevance of project implementation are highly appraised.



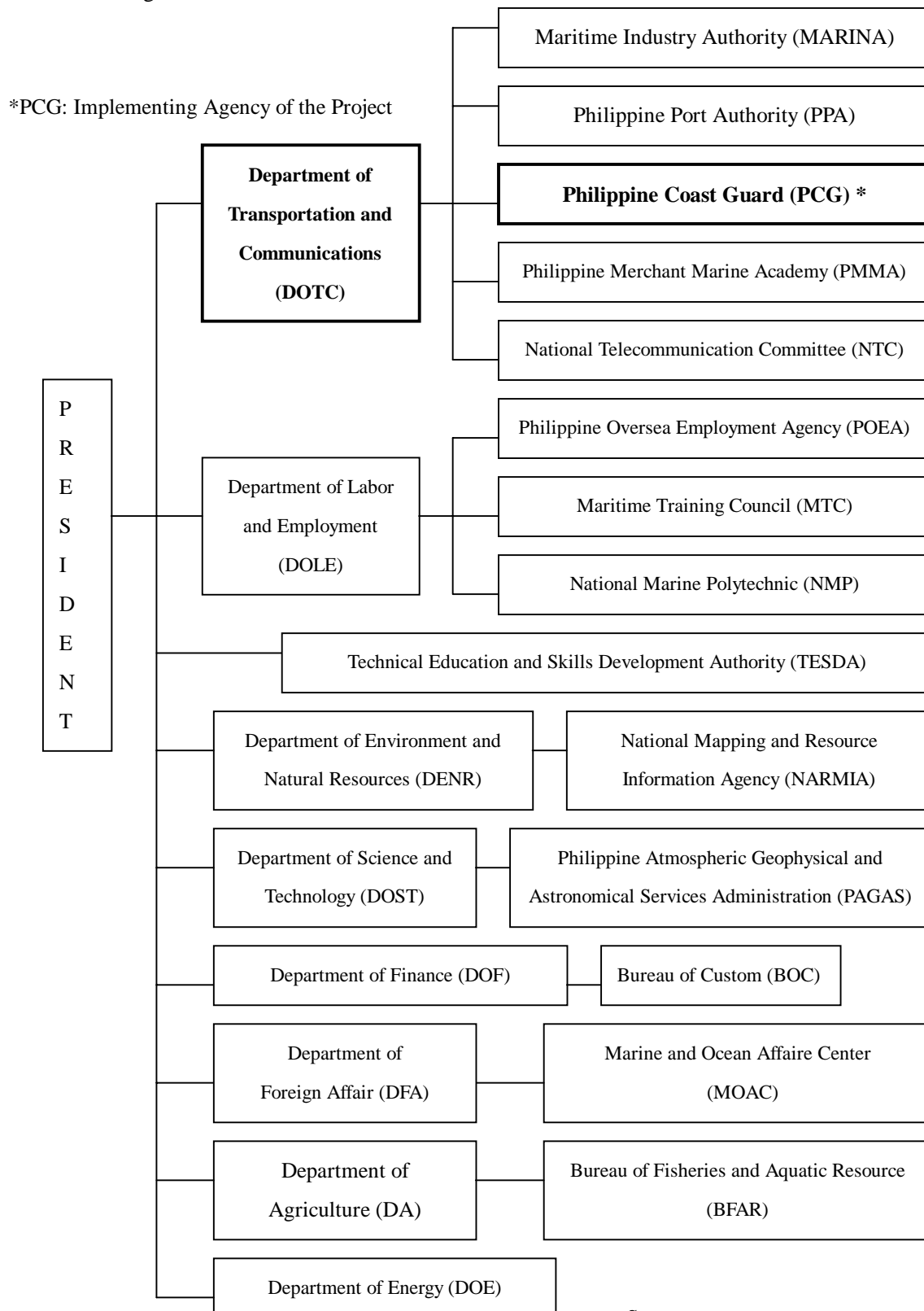
Chapter 3. Problems to be addressed and the Current Situation

3.1 Systematical and Institutional Frameworks of the Sector

1. Maritime Related Organizations

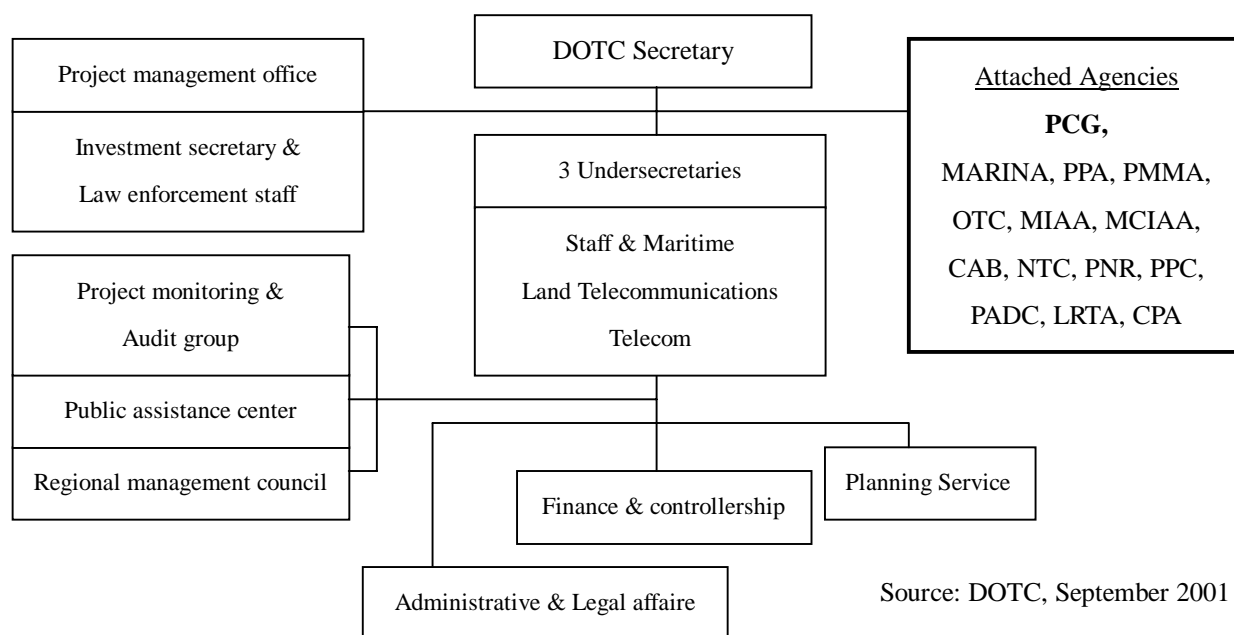
The Authority Concerned of the Project is Department of Transportation and Communications (DOTC).

Other related agencies of the sector are shown as below.



Source: PCG, MARINA, Government website

DOTC and Attached Agencies of the Sector



Main maritime agencies and their roles

PCG: Philippine Coast Guard (Implementing Agency)	Established in DND in 1967 and transferred to DOTC in 1998. A comprehensive policy-implementing agency for maritime safety and security.
MARINA: Marine Industry Authority	Established in 1974, supervisor for economical activities of marine industries, such as shipping company, shipbuilding.
PPA: Philippine Port Authority	Established in 1974, supervisor for port and harbors administration
PMMA: Philippine Merchant Marine Academy	Marine education and issue of certificate, 30% of new staffs of PCG in 2001 is graduates from PMMA
DENR: Department of Environment and Natural Resource	Supervising of marine environment in the sector. PCG is deputized to implement a part of maritime law enforcement services of DNER.
DOF: Department of Finance	PCG was deputized to implement some custom laws enforcement such as anti-smuggling of BOC under DOF.
DOE: Department of Energy	Supervise of oil tankers, cooperate with PCG in terms of MARPOL, PCG is deputized to implement a part of services of DOE.
DA: Department of Agriculture	A part of law enforcement services are deputized to PCG from DA for preservation of natural resources, such as anti-illegal logging.
DFA: Department of Foreign Affairs	MOAC of DFA undertakes research and development for maritime Safety and marine environmental preservations
TESDA: Technical Education and Skills Development Authority	TESDA issues certificate for general crew.
MTC: Maritime Training Council	Supervising the educational level and curriculum of marine educational institution of the nation, PCG is a member of MTC.

2. Marine & Maritime Domestic Laws and Orders

Republic Act No. 5173, 1967, PCG was established by the RA.

Executive Order No. 125 & 125-A 1987, MARINA was transferred to DOTC

Executive Order No. 474, Mandate as economic management agency to MARINA

Executive Order No. 475, 1998, PCG was transferred to DOTC from DND by the EO

Department Order 1180 (Maritime safety administration)

Presidential Decree No. 1152- Philippine Environmental Code (MARPOL)

Presidential Decree No. 1151- Philippine Environmental Policy (MARPOL)

Presidential Decree No. 1586- Environmental Impact Statement (EIS) System (MARPOL)

Presidential Decree No. 600- Marine Pollution Decree of 1974 (MARPOL)

Presidential Decree No. 601- Revised Coast Guard Law of 1974

Presidential Decree No. 602- Establishing National Operations Center for Oil Pollution (NOCOP)

Presidential Decree No. 979- Marine Pollution Decree of 1976 (MARPOL)

Presidential Decree - National Marine Policy- Section 3 (MARPOL)

Source: PCG

3. Functions and duties of PCG

Whole Philippine Sea area and the Pasig River are within the service exercise of PCG. PCG implement the following five main functions. Total staff of whole PCG organization in November 2001 is 3,982 including 290 officers, 3,190 enlisted personnel (EP) and 502 un-uniformed personnel.

Main 5 Functions of PCG

MARSAR: Operation of SAR mission, Establishment of SAR communication system (GMDSS), Maintenance of SAR equipment, Provision on SAR facilities, SAR Survey, etc.

MAREP: Prevention of marine pollution, Marine environmental protection, Oil spill combating, Protection of marine resources, Enforcement of environmental laws, implementation of international conventions, etc.

MARLEN*: Enforcement of applicable laws for anti-illegal fishing, anti-piracy, anti-seajack, anti-smuggling, anti-illegal logging, etc.

MARSAD: Encouragement of vessel safety regulations, Port state control, Crew competence, Provisions of ATON, Removal of hazardous conditions for navigations etc

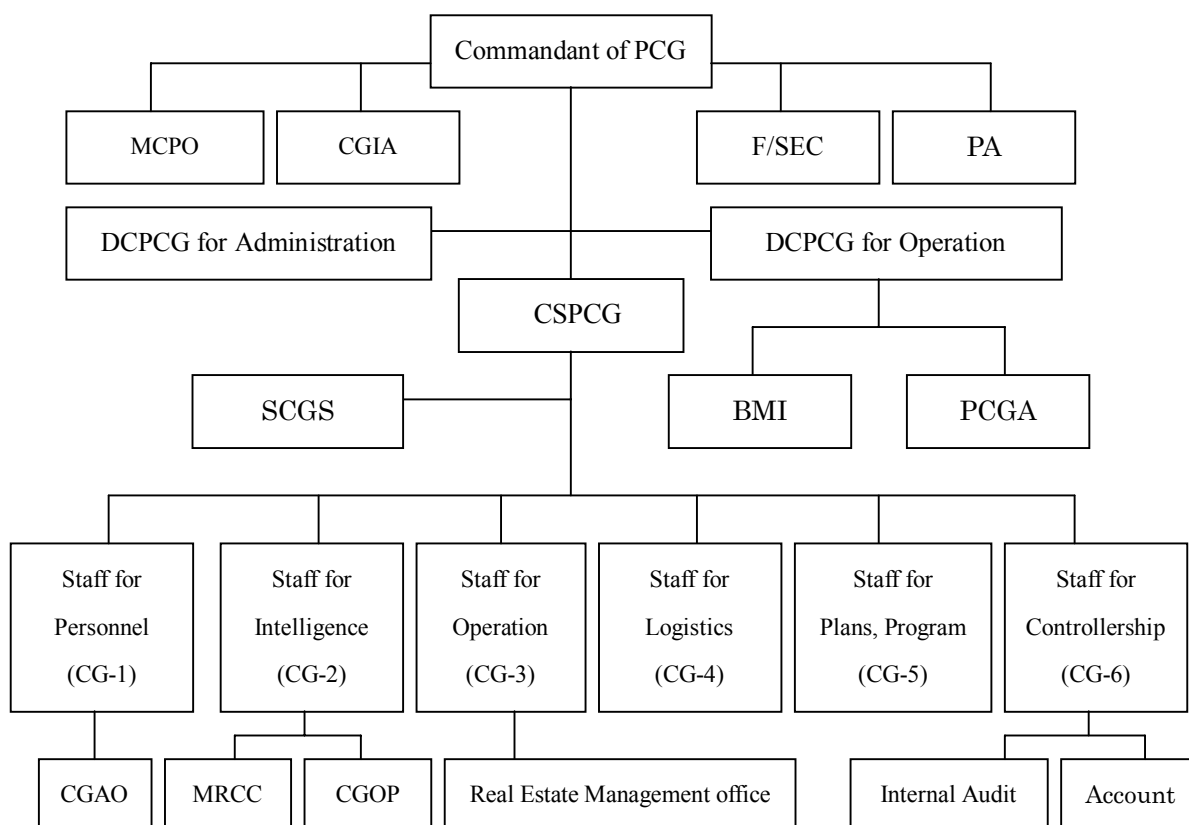
MAROP: Maritime security patrol, Public affaire, Implementation of PCGA program, etc

Note: *All of MALEN functions for PCG is to enforce deputized functions from other governmental agencies (anti-smuggling from BOC, anti-illegal-logging from DENR, anti-illegal fishing from BFAR etc)

4. Organization of PCG

Since transferring to DOTC from DND in 1998, PCG has been undertaking the Re-organization continuously for the purpose of its enhancement of functioning capability of the organization. The former PCG Headquarters and Staff Organization until 2001 is shown in ANNEX 7.9. The following is the present Working PCG Headquarters and Staff Organization through the Re-organization.

Working PCG Headquarters and Staff Organization



Source: PCG, March 2002

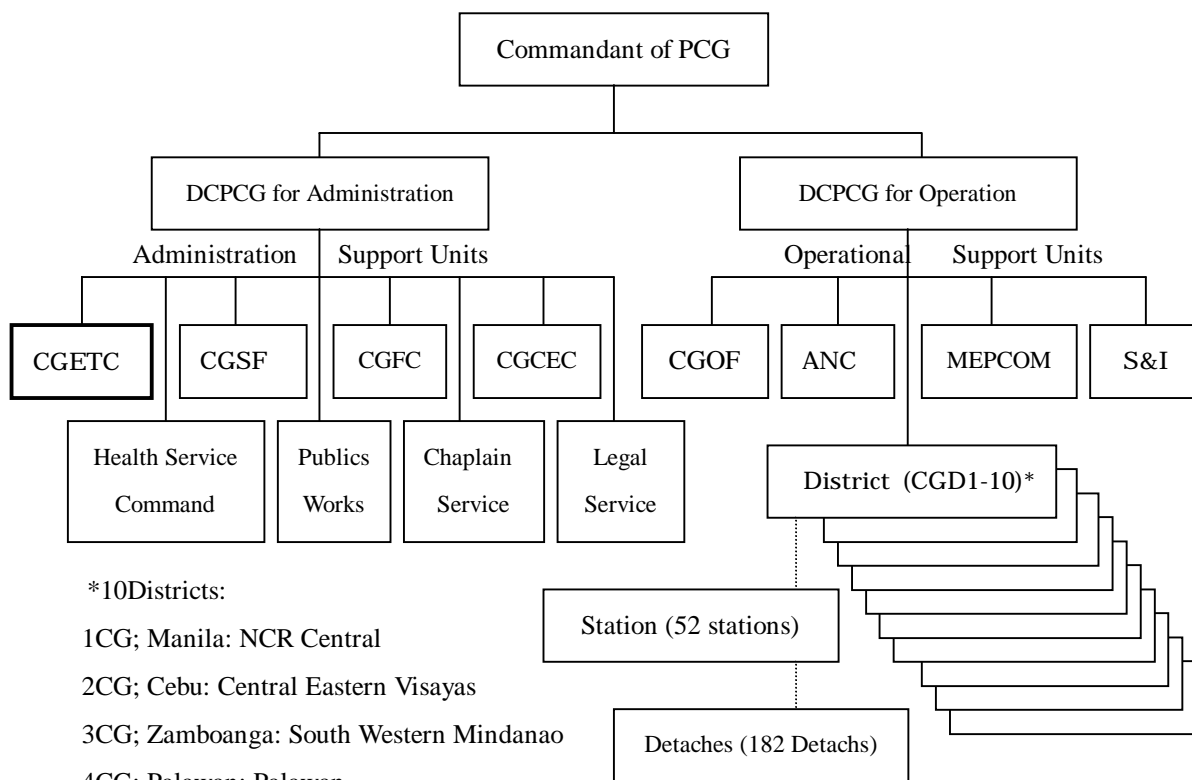
[Acronym]

BMI: Board of Maritime Inquiry, CGIA: Coast Guard Internal Affairs, CSPCG: Chief of Staff, PCG, CGAO: Coast Guard Office, CGOC: Coast Guard Operation Center, Deputy Commandant of PCG, F/SEC: Flag Secretary, MCPO: Master Chief Petty Officer, MRCC: Maritime response coordinating center, PA: Public Affairs, DCPCG, PCGA: PCG Auxiliaries Affairs, SCGS: Secretary of Coast Guard Staff

The offices of former Staff for Training (CG-7), Staff for Maritime Safety Affaire (CG-8), Staff for Environmental Protection(CG-9), Staff for Aids to Navigation (CG-10), Staff for Communication/Electronic (CG-11) and Staff for Ship Engineering & International Affaire (CG-12) were transferred to the functional units due to the Re-organization of PCG. For education and training, former CG-7 was transferred to CGETC to be one of groups in this Command. The roles of former CG-7 were to advise the Commandant of PCG on matters pertaining to training, and CGETC takes charge of its roles at present. The roles of

Staff for Personnel (CG-1) is responsible in determining the required rating classifications promotions, demotions and assignment of all PCG personnel, while CGETC is responsible in determining the education and training career pattern, required specialization courses program based on job assignment and rating classification of PCG personnel. CGETC, the project focused site, is the operating unit that implements the education and training program of PCG personnel. The present Working PCG Organizational Set-up is shown as below.

Working PCG Organizational Set-up



*10Districts:

- 1CG; Manila: NCR Central
- 2CG; Cebu: Central Eastern Visayas
- 3CG; Zamboanga: South Western Mindanao
- 4CG; Palawan: Palawan
- 5CG; Batangas: Southern Tagalog,
- 6CG; Iloilo: Western Visayas, 7CG; San Fernando: Northern Luzon,
- 8CG; Davao: South Eastern Mindanao
- 9CG; Legaspi: Bicol, 10CG; Cagayan De Oro: Northern Mindanao

See ANNEX 7.8 *Map of Districts, Stations and Dispatches*

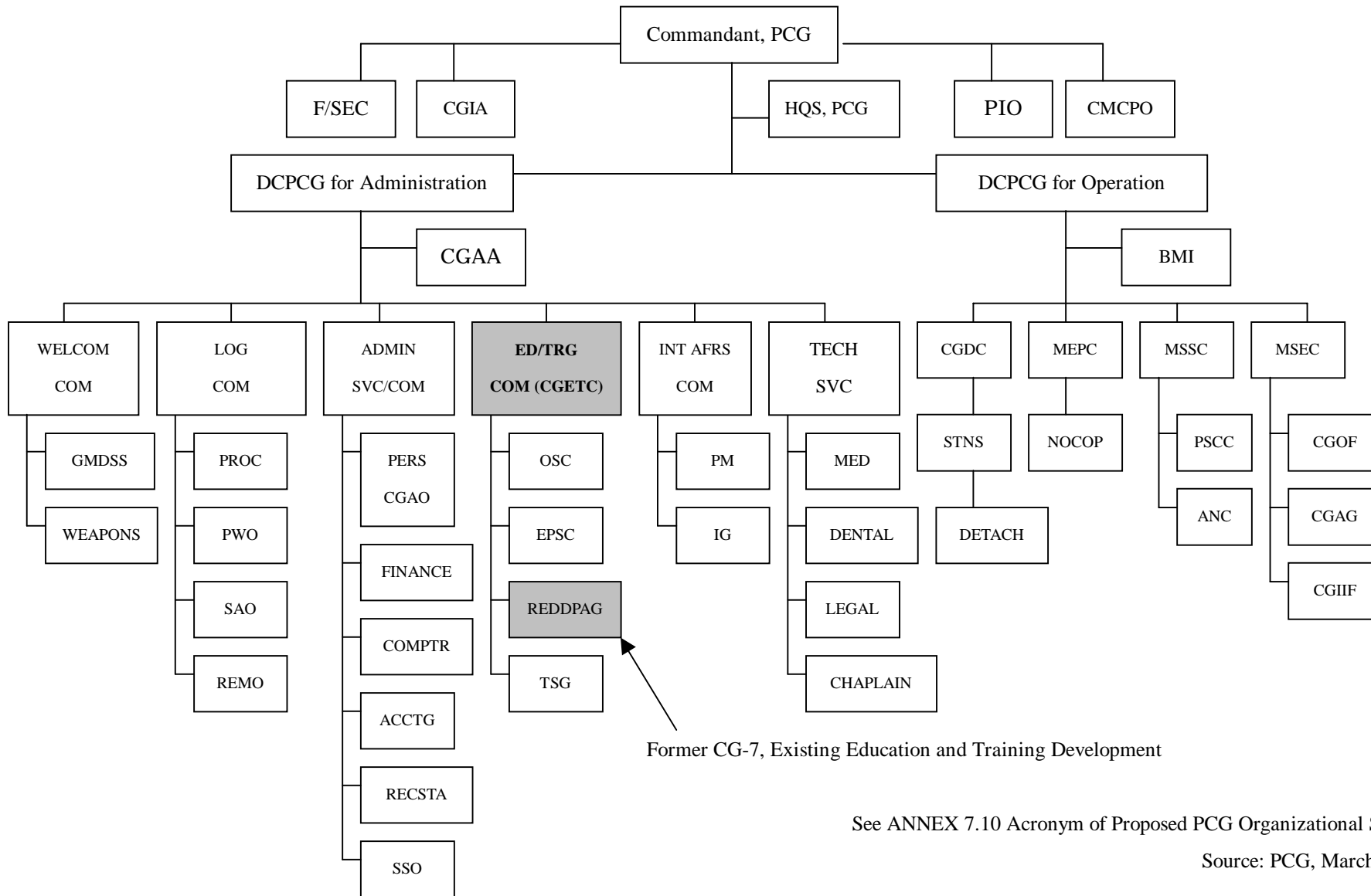
[Acronym]

ANC: Aids to Navigation Command, CGETC: Coast Guard Education and Training Command,
 CGFC: Coast Guard Finance Center, CGSF: Coast Guard Support Facility,
 CGCEC: Coast Guard Communications and Electronics Command, CGOF: Coast Guard Fleet Command,
 MEPCOM: Maritime Environmental Protection Command, S & I: Security and Investigation Command

Source: PCG, March 2002

The Re-organization of PCG is still going on, and Proposed PCG Organizational Set-up in the future is shown as the following page. Acronym of the Proposed Organization is shown in ANNEX 7.10.

Proposed PCG Organization



Former CG-7, Existing Education and Training Development

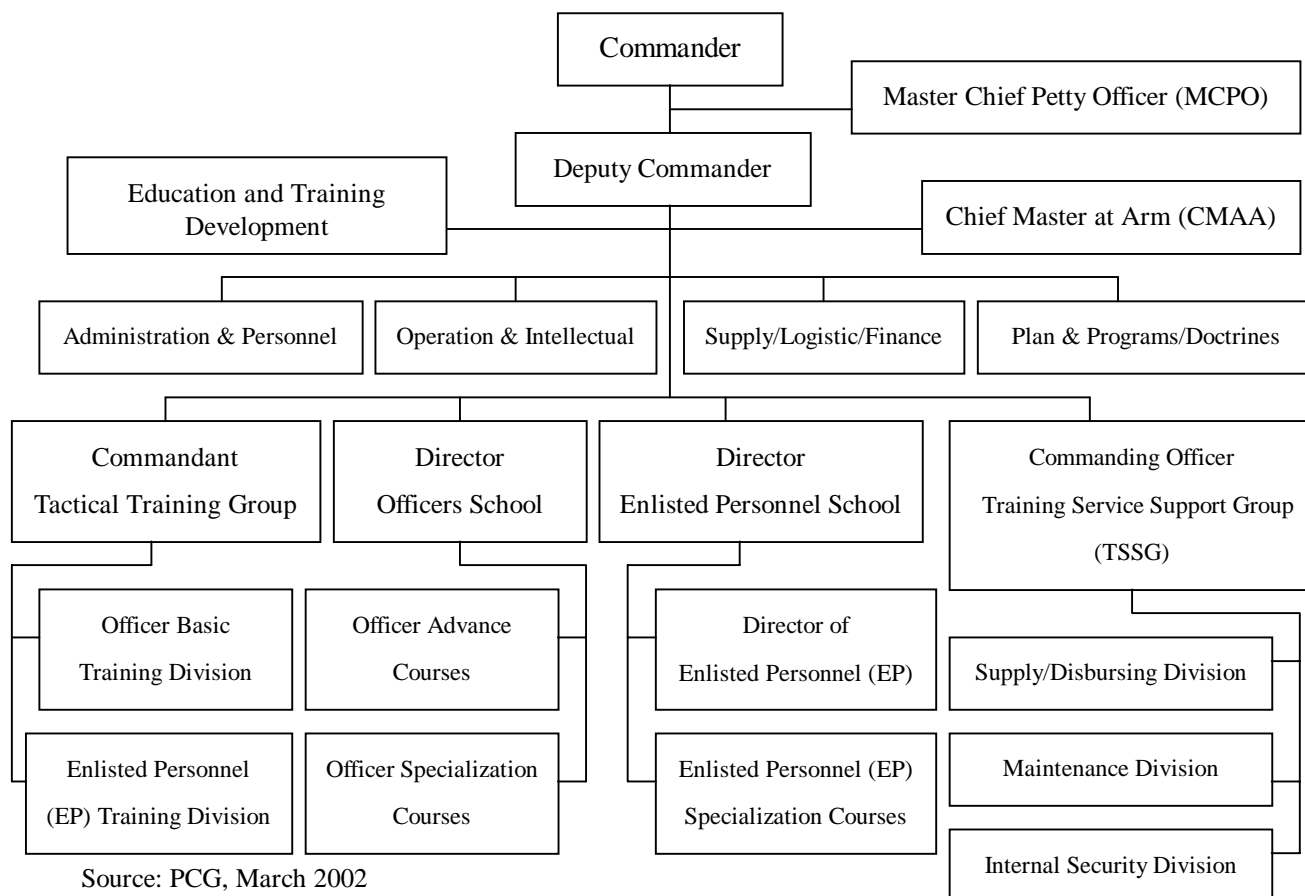
See ANNEX 7.10 Acronym of Proposed PCG Organizational Set-up

Source: PCG, March 2002

5. Coast Guard Educations and Training Command: CGETC

CGETC is responsible in the conduct of education and training courses, seminars and other activities that involve the development of personnel skill and competence essential to the accomplishment of PCG mission.

CGETC Organization



Source: PCG, March 2002

Main sections and its activities of CGETC

Commander	Top leader and responsible of CGETC
Deputy Commander	Act as an advisor to Commander of CGETC
Education and Training Development	Act as an advisor to CGETC on matters pertaining to PCG Education and Training. This former CG-7 will be renamed to REDDPAG in the future.
Administration & Personnel	Provide functional supervision in regard to personnel and administration
Operation & Intellectual	Provide staff and policy supervision on all activities of CGETC
Supply/Logistic/Finance	Institute logistical policy for CGETC, coordinate with HPCG for logistical requirement of CGETC
Plan/Program/Doctrine	Adviser of Commander on the short-term/medium-term plans of CGETC. Develop and collates curricula and doctrines of CGETC
Tactical Training Group	In charge of basic training of PCG personnel, headed by Command
Officers School	In charge of advance and specialization training of officers
Enlisted Personnel (EP) School	In charge of advance and specialization training of EP
Training Service Support Group	In charge of basic training of PCG personnel, headed by the Command

Education and Training program at CGETC is implemented for officers and enlisted personnel of PCG based on the education and training policy of PCG personnel and on the recruitment plan.

Actual, Current and Planned Number of Personnel of Whole PCG from 2002 to 2007

	2001 Actual	2002 Current	2003Planned	2004Planned	2005Planned	2006Planned	2007Planned
Officers	290	355	412	483	558	558	558
EP	3,190	3,790	4,692	5,996	7,954	7,954	7,954
Non-uniformed	502	502	502	502	502	502	502
Grand total	3,982	4,647	5,606	6,981	9,014	9,014	9,014

Source: PCG, March 2002

Actual, Current and Planned Number of Personnel of CGETC from 2002 to 2007

	2001 Actual	2002 Current	2003Planned	2004Planned	2005Planned	2006Planned	2007Planned
Officers	9	9	10	13	13	14	15
EP	46	46	48	56	58	58	58
Grand total	55	55	58	69	71	72	73

Source: PCG, March 2002

6. In-house Education and Training at CGETC

Training at CGETC are offered through 1) Basic course, 2) Advance course, 3) Other peculiar course until 2001, and 4) Specialization course has started in 2002. Apart from courses, 5) Seminars for other organizations are conducted indeterminately dependent on the annual schedule and capacity.

Actual number of Students of training course at CGETC from 1999 to 2001

Course	Module	Dur.	1999	2000	2001
Basic course	Coast Guard Officers Course 'A' (new recruited)	8 mth	-	24	36
	Coast Guard Officers Course 'B'	6 mth	-	-	-
	Coast Guardsman Course 'A' *	6 mth	814	80	210
Advance course	Coast Guard Command and Staff Courses	6 mth	-	31	28
	Advance Management & Leadership Course	6 mth	-	-	40
Other peculiar course	Basic Weather Observation Course	4 wks	51	-	-
Total number of students (persons)			869	135	314

Source: PCG, September 2001

Actual number of participants of Seminars at CGETC from 1999 to 2001

Seminar title	Duration	1999	2000	2001
<i>GMDSS Familiarization Seminar</i>		123	-	412
<i>Basic First Aid and Life Support Seminar</i>	1~2 wks	50	54	-
MARPOL Seminar		-	55	-
Total number of participants (persons)		173	109	412

Source: PCG, September 2001

Seminars are offered particularly for the fields private sector are not familiar with; expertise like SAR planning and operation, OSC, MARPOL and Anti-piracy cooperation so on.

In 2002, CGETC has developed both specialization and other peculiar course programs as follows.

Course and Module of CGETC In-house Education and Training in CY 2002

Course	Module	Tech*	Student	Duration	S/E**	Location
Basic course	Coast Guard Officer Course 'A' Class 03		30	8 mth	4/11	CGETC Manila & Zambales
	Coast Guard Officer Course 'B' Class 01		30	6 mth	3/8	
	Coast Guardsman Course 'A' Class 05		80	6 mth	3/8	
	Coast Guardsman Course 'A' Class 06		80	6 mth	9/2	
Specialization course	Navigation Communication Class 01		40	4 mth	11/4	CGETC, Manila
	Seamanship Class 01		40	4 mth	9/2	
	Engineering Class 01		40	4 mth	6/11	
	ATON Specialization		40	6 mth	2/7	
	MARSAR Specialization		40	6 mth	3/8	
	Vessel Safety Specialization		40	6 mth	7/12	
	MAREP Specialization		40	6 mth	2/7	
Advanced course	Coast Guard Command and Staff Course		25	6 mth	3/8	CGETC, Manila
	Advanced Management & Leadership Course		40		7/12	
Other PCG peculiar course	Ship Watch Standing Package Course		25	1 mth	2/2	CGETC, Manila
	Deck Watch and Planning Officer Course		25		5/5	CGETC, Manila
	Engineering Watch and Planning Officer Course		25		6/6	CGETC, Manila
	Commanding Officer Package Course		10		8/8	CGETC, Manila
	Executive Officer Package Course		10		4/4	CGETC, Manila
	Boat Captain Course		20		5/5	CGETC, Manila
	Boat Engineering Course		20		6/6	CGETC, Manila
	Maritime Investigation Course		20		9/9	CGETC, Manila
	Basic Scuba Divers Course		25		2/2	CGETC, Manila
	Anti-Sea jacking Course (CQB)		25		9/9	CGETC, Manila
	Explosive, Ordinance Demolition Course		25		12/12	CGETC, Manila
	Instructor Course		20		4/4	CGETC, Manila
	Drill Instructor Course		20		8/8	CGETC, Manila
	LH Operations and Maintenance Package Course		20		10/10	CGETC, Manila

Note *: Relation with the fields for technology transferred of the Project;

Courses aimed for technology transfer, A part of courses aimed for technology transfer,

Courses not aimed but having with some possibility for technology transfer

** : S/E; Start month and Ending month of the module/course

Basic course is conducted for a larger number of students by using the both facilities of CGETC Farola in Manila and CGETC Annex in Zambales. Likewise, seminars can be conducted in HQS PCG and other units including CGETC.

Commander and course director sign the certificates of those who successfully passed course computed based on grade weight per module. Examination and evaluation are not implemented for seminar participants who are not PCG personnel.

The Project will aim the technology transfer in the fields of SAR, ATON, MARPOL & OSC and MRLEN, through course revision and development and seminar improvement. MARLEN specialization course is envisioned to start in 2003 through the Project.

In reference to the future training plan, See *ANNEX 7.11 Plan of PCG Training CGETC from 2002 to 2007*
In reference to directly aimed number of student (PCG personnel) in the Project, See '*Number of students estimated for technology transfer of the Project*' in Chapter 4, 4.1.2. '*Specific Strategy of the Project*'.

7. Gender Issue of the Philippines

The Government indicates all the country policies on gender issue to date in '*National Guideline in Philippines-Project Development*'. GAA (General Appropriation Act) recommends all governmental organizations and agencies to apply the Gender and Development Plan (GAD) that at least 5% of the agencies total budget shall be used for gender program. PCG is adopting this policy of the GAA.

Summary of Gender issue and the policy in National level of the Philippines

'Memorandum Order No. 282'; Directing Various Government Training Institutions to Incorporate in their Respective Curricula Gender and Development (GAD) Concerns and Programs of 19 May 1995

'The Medium-Term Philippine Development Plan (MTPDP) 1993-1998'; This plan provided the basic framework within which government agencies designed their work plans. Present MTPDP follows the policy.

'Philippine Human Rights Plan, 1996-2000'; This plan embodies a call to national action for appropriate legislative, administrative and program measures to address the human rights concerns including women.

'Philippine Plan for Gender-responsive Development, 1995-2025'; The comprehensive perspective plan for gender and development and it serves as the government's blue print for action in promoting women's advancement. This plan is the successor of the Philippine Development Plan for Women 1989-1992.

Source: Document offered by PCG, International Labor Organization (ILO)

3.2 Problems to be Addressed for Development (Problem Analysis)

See ANNEX 7.5 'Problem tree'

1. Core Problem; '*Limited Performance Capability of PCG*'

'*Limited Performance Capability of PCG*' was identified as a *Core problem* of the sector through problem analysis of PCM Workshop. Nine direct causes bring about the Core problem were identified.

Core Problem: '*Limited Performance Capability of PCG*'

Direct causes: 1. Insufficient number of PCG

- 2. **Manpower competency is low**
- 3. Insufficient facilities and equipment of PCG
- 4. Limited operation of PCG vessels
- 5. Insufficient enforcement of marine law
- 6. Ineffective implementation of maritime regulations
- 7. Short changing of procurement
- 8. Technical competency of seafarers is low
- 9. Natural conditions in the Philippine Sea area is harsh

2. Effects of the core problem; '*Loss of life and property, and marine environmental pollution at the Sea*'

It is recognized that the following incidents and cases contribute to loss of life and property, and to marine environmental pollution.

1) Maritime Incidents

The Philippine Sea area has congested transport routes among narrow water area, incidents happen frequently because of geographical as well as meteorological reason with high occurrence of typhoon (direct cause 9).

Number of Maritime incidents and its Victims

Type	1998	1999	2000	2001September
Number of Maritime incidents	210	263	161	61
Missing persons & Casualties	335	350	416	85
Number of PCG SAR Mission	86	219	50	25

Source: '*Maritime Incident Report CY1995-2000*', PCG Coast Guard Action Center, November 2001

Number of incident by type

Type	1997	1998	1999	2000	Total
Aground	5	42	44	20	111
Sinking	16	37	37	22	112
Collision	6	5	5	14	30
Caught fire	8	9	10	9	36
Capsized	11	88	109	50	258

Missing	0	12	0	6	18
Drifted/Engine trouble	9	8	0	6	23
Flooding	0	0	0	2	2
Rammed	2	6	3	2	13
Others	2	3	55	30	90
Total No of Incidents	59	210	263	161	693

Source: 'Maritime Incident Report CY1995-2000'

Data shown in the table below indicates that great amount of losses is estimated by incidents and crimes at the sea, and thus the great benefits would be expected in the case the said losses are protected.

Losses due to Maritime incidents				(Unit: pesos)
Year	Vessels lost	Cargo lost	Human lives lost	Total loss
1986 - 1990	1,0179,800,000	217,600,000	215,300,000	1,512,600,000

Source: Report of the Study on MSIP-C, 1995, loan project assisted by JBIC.

2) Pollution cases

Oil spilling and chemical product leak contributing to environmental pollution are recognized as serious issues. Those are caused not only by waterborne source like spilled hazardous goods from ships but also by land-based sources such as waste oil leak or waste water discharge from plants, and illegal dumping of hazardous goods so on (NOCOP Report 2001).

Number of Marine Pollution cases				
Type	1998	1999	2000	2001
Number of Pollution cases	9	14	29	15

Source: PCG Statistics; Coast Guard Action Center, November 2001

3) Piracy, seajack and smuggling

Piracy, seajack and smuggling constitute a grave menace to the safety of the nations, which contribute to the loss of life and property. Although the cases of piracy and seajack had been slightly decreased in 1999, reduction was unstable and have increased the next year. Since the report system has not developed in the country, actual number of cases is perceived as more.

Piracy and Seajack (armed robbery) Cases				
Case / Year	1998	1999	2000	2001 September
PIRATED*	100	66	83	79
SEAJACKED**	16	6	13	9
Total	116	72	96	88

Source: PCG Statistics, Coast Guard Action Center, November 2001

Piracy cases and its Victims

Type	1998	1999	2000	2001
Piracy cases	100	66	83	79
Killed persons	33	14	29	15
Wounded persons	40	5	2	4
Missing persons	15	2	1	8

Source: PCG Statistics; Coast Guard Action Center, November 2001

Smuggling cases include smuggling of small arms, drugs, logging, human entry and others that are transported to foreign countries including Japan, which contribute international crimes.

Smuggling Cases

Case / Year	1998	1999	2000	2001
Inbound	276	233	162	209
Outbound	36	28	45	46
Transfer	796	156	149	92
Total	1,108	417	356	346

Source: PCG Statistics, Coast Guard Action Center, November 2001

4) Illegal fishing and poaches

Since illegal fishing or poaches have destroyed corals reefs and seaweeds, loss of marine resources is estimated at some 2 billions pesos. (*'PCG Marine Environmental Protection Master Plan'*)

3. Direct Causes of *'Limited Performance Capability of PCG'*

There are two factors commonly identified on PCG functions, which contribute to the said core problem.

- a) **Low competency of PCG personnel for special technique mission** (direct cause2) and
- b) Insufficient number of PCG personnel trained with adequate educational training (direct cause 1).

It is evident that maritime incidents/cases and its damages can be grown more serious by human-made reasons such as low technical competency of seafarers (direct cause 8), short changing of procurement (direct cause 7), low operation rate of air & water assets because of inadequate maintenance and overage of equipment so on.

Air & water assets Belonging to PCG in 2000

Type	Total number (A)	Operational (B)	Inoperative (A-B)
Vessels	7	4	3
Small craft	38	20	18
Water craft	41	30	11
Air craft	4	2	2

Source: PCG document, September of 2001

Insufficient information system (direct cause 3&4) also contributes to the damage and the loss. To take measures against maritime incidents, poaches, illegal waste dumping, piracy and smuggling cases calls for improvement of radio information system. More services and technique for law enforcement and effective regulation (direct causes 6 & 5) is required for prevention activities. It is stressed that enhancement of PCG capability to fulfill their duty through CGETC will alleviate the damage and the loss at the sea.

4. Causes of ‘*Manpower Competency is low*’ (direct cause 2)

It is recognized that insufficient training system hinders to develop capable PCG personnel. The following issues are indicated to improve at CGETC.

1) Educational program and curriculum

Consistent education system has not been established yet in CGETC. None of courses possess standard textbooks and materials, however document prepared by courses instructor are used in the classes.

2) Practical training

Difficult situation are found for practical training without a gymnasium, diving pool nor small vessel, and CGETC are not able to conduct periodical practice training. Vessels belonging to other PCG units and private merchant company are utilized when available.

3) Instructor/Lecturer

Full-time instructors are limited; some are invited from other organization. There is no specific in-service training system at present for instructor and lecturer development.

4) CGETC facilities and equipment

CGETC has 4 classrooms for lecture, one computer laboratory and one small library. The library and the meeting room share one room with a partition. The library owns limited and insufficient aid-books.

Classroom, laboratory and its conditions in CGETC

Floor	Name of classroom	Floor area	*Condition
1	Classroom 1	72.0sq.m	B: Soundproof is preferable
1	Classroom 2	72.0sq.m	B: Soundproof is preferable
1	Classroom 3	72.0sq.m	B: Soundproof is preferable
1	Classroom 4	72.0sq.m	B: Soundproof is preferable
2	Library/Meeting room	72.0sq.m	-
2	Computer laboratory	72.0sq.m	B: More computers are needed

Note: The building has 3 floors; administration offices are on the 2nd floor, the 3rd is used for the dormitory.

*Condition: A. Sufficient for training, B. Improvement is needed, C. Inadequate for training

Audio-visual equipment, special model and stimulation device are insufficient for systematical technical training. More computers for the navigation training are required; eleven are used in rotate in the computer laboratory and six for administrative offices.

Existing equipment and vehicles in CGETC

Item	Quantity	*Condition (A-B)
[Educational equipment]		
Overhead projector	2	A
Multimedia projector	1	A
Computer	17	A
Table for computer	20	
Photocopy machine	1	
[Vehicle]		
Microbus for 24 persons	1	
ELF-L300	1	
STRADA L-200 (used car)	1	
Jeep	1	

Source: Information supplied by PCG, September of 2001

*Condition: A Sufficient for training, B Improvement is needed, C Inadequate for training

Chapter 4. Project Strategy

4.1 Project Strategy

See ANNEX 7.5 *Objective tree* identified by objective analysis

1.The Core Objective '*Performance capability of PCG is improved*'

Desirable situation of the sector was identified as '*Performance Capability of PCG is improved*' through the PCM Workshop. Eight direct means were found out so as to achieve the Core objective.

Core objective: '*Performance Capability of PCG is improved*'

Direct means 1. Number of PCG personnel increased

2. Competence of PCG personnel improved

3.Adequate facilities and equipment

4.Multilateral cooperation with other organization (public, private, domestic and international)

5.Enhancement operation of PCG vessels

6.Sufficient enforcement of marine laws

7.Effective implementation of maritime regulations

8.Graft-free

4.1.1 Overall Strategy of the Project (Long-term Strategy identified by Objective Analysis)

1. Direct Means; *'Enhancement of both Hardware & Software situation for the Whole PCG duties'*

'Performance Capability of PCG is improved' (Overall goal) calls for the achievement of *'PCG personnel with necessary knowledge and skill to perform their functions are developed'* (Project purpose). Both of software improvement and hardware improvement (assumptions) are expected to attain the overall goal.

Measures for hardware improvement:

- a) Procurement of air & water assets and equipment for MARSAP, MAREP, MARLEN and
- b) Procurement of fuel & spare parts is required, since PCG possesses neither enough assets nor equipment for MARLEN (direct mean 3) and fuel & spare parts are insufficient for operation (direct mean 5).

Measure for software improvement:

- a) Strategy making & patrolling increase, b) technique & manual up-grade, c) budget planning to promote equipment procurement, d) data-base & information system set-up, and e) coordination and role demarcation with other MARLEN agencies (direct means 6 & 7). Furthermore, f) recruitment of PCG personnel (direct mean 3), and g) the strengthening of training system (direct mean 5) are indicated.

4.1.2 Specific Strategy of the Project (Identified by Alternative Analysis & Project Selection)

Twelve different approaches (A-L) were identified to realize the Core objective; *'Performance capability of PCG is improved'* through Alternative analysis & Project selection in the Workshop. Selecting the approach B and some means from other approaches has finalized the approach L as the Project strategy, which is *'PCG performance capability enhancement approach'*. The project title was finalized as *'The Project on Philippine Coast Guard Human Resource Development'* in the end of the Workshop.

Core objective: *'Performance capability of PCG is improved'*

A. Recruitment approach (assumption)

B. Human resource training approach

C. Facilities enhancement approach (assumption)

D. Competence enhancement approach (B + F)

E. Facilities and equipment enhancement approach (C + G) (assumption)

F. Multilateral cooperation approach

G. Operational enhancement approach

H. Law enforcement enhancement approach

I. Law and regulation approach (H + J)

J. Maritime regulation approach

K. Graff-free approach (risk)

L. PCG performance capability enhancement approach

(B + F + a part of G + a part of H + a part of J)

2. 'PCG Performance Capability Enhancement Approach' (L)

Improvement of educational system of CGETC (approach B) was identified as the top priority area. Additional measures such as technology update, new technology introduction and improvement of the information system management for SAR, ATON, MARPOL & OSC and MARLEN (a part of G, H and J) were selected from other approaches. Human resource development at CGETC is expected for all maritime sectors to supply specialists and officers including other governmental and private sector as a long-term objective through multilateral coordination among maritime agencies (F).

3. Specific Strategy of 'PCG Performance Capability Enhancement Approach' (Approach L)

Measures to resolve above-mentioned problems were identified through analysis work in the Workshop and the discussion.

1) Improvement of educational program and curriculum

Review of existing curriculum will be conducted for suitable course design and curriculum up-grade adjusting to current PCG functions. IMO model courses will be reviewed to find the adaptable courses for CGETC. Aids materials supplied by instructors shall be examined to develop textbooks.

2) Enhancement of practical training

Facilities for practical training, such as ground, gymnasium, diving pool, small craft and training vessels so on, should be improved. Training schedules planning for use of vessels belonging to PCG should be designed so as to ameliorate the current training situation.

3) Development of instructor and lecturer

Specialized course for instructor training will be discussed. Through coordination with instructor invited from other organizations, a consistent training system and an instructor development plan will be identified and conducted. IMO 6.09, the instructor-training course, will also be reviewed to introduce.

4) Improvement of facility and equipment of CGETC

Operation plan of classroom and laboratory will be designed and implemented for full effective use of the facility. Book classifying system is preferable for library management to establish a student-kindly system. Adequate aids material will be procured.

5) Activities for seminars and public awareness

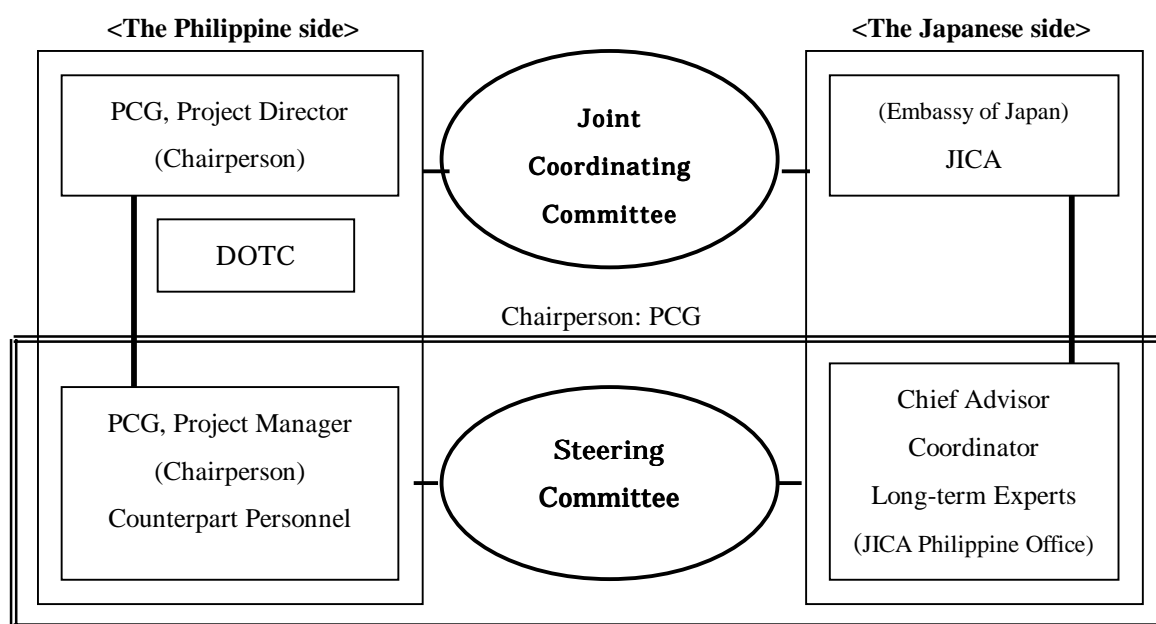
Existing seminars offered to PPA, local governmental agencies, PCGA, shipping companies and oil companies of the both public and private sector will be examined and upgraded. Activities for public awareness in the fields of MARSAP, MAREP and MARLEN will be designed and conducted.

4.2 Organization of the Project Implementation

1. Implementation Structure of the Project

Deputy Commandant for Administration, PCG, as the Project Director, will bear overall responsibility for the administration and implementation of the Project. Commander of CGETC as the Project Manager will take the responsibility of supervising of the managerial and technical matters of the Project.

Joint Implementation Structure of ‘the Project on PCG HRD’



2. Coordinating Committee and Steering Committee

Both sides agreed to establish the Joint coordinating committee and the Steering committee for the effective and successful implementation of the Project

1) Joint Coordinating Committee

Meeting, Function and Members of Joint Coordinating Committee

<Meeting> At least once per year and whenever need arises

<Function> -Formulate the annual work plan of the Project based on the tentative schedule of implementation within the framework of the R/D
 -Review the result of the annual work plan and the progress of the technical cooperation
 -Review and exchange opinions on major issues that arise during the implementation of the Project

<Philippine side> Staff of PCG*, DOTC Representative

<Japanese side> Japanese Chief Advisor, Japanese Long-term experts, Coordinator, Resident representative of JICA Philippine Office, JICA Study Team, Observer: Representative from Japan Embassy

*Members of the Coordination Committee in PCG side

1	Deputy Commandant for Administration, PCG (Project Director/ Chairperson)
2	Commander, CGETC (Project Manager)
3	Commander, CGOF
4	Commander, ANC
5	Commander, MEPCOM
6	Staff for Operation (CG-3)
7	CGETC Staff (Project member)

2) Steering Committee

Meeting, Function and Members of Steering Committee

<Meeting> 3 or 4 times per year and whenever need arises

<Function> Facilitate the smooth implementation of the Project

<Philippine side> Staffs of PCG**

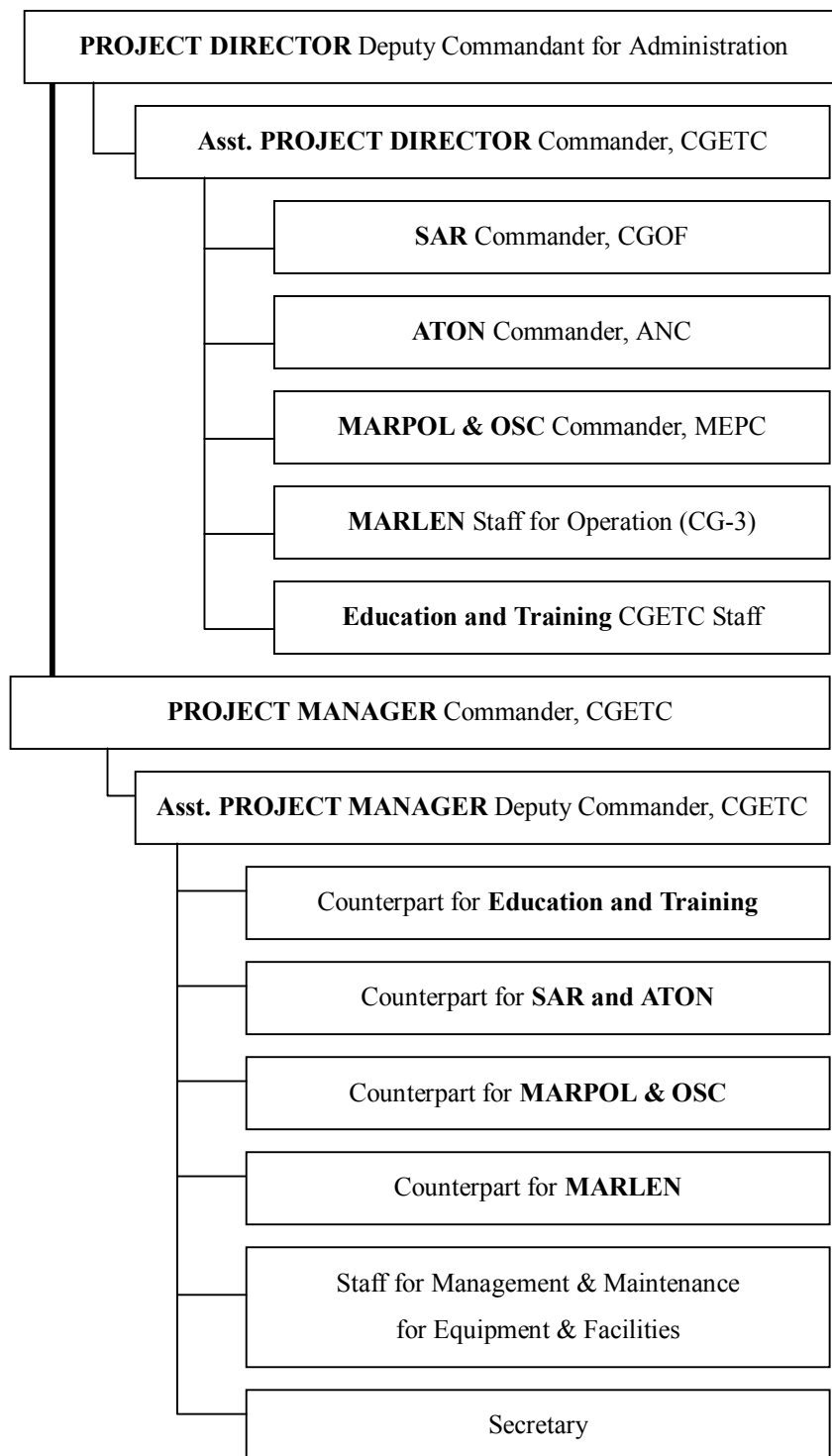
<Japanese side> Japanese Chief Advisor, Japanese long-term Experts, Coordinator

** Members of the Steering Committee in PCG side

1	Commander, CGETC (Project Manager/ Chairperson)
2	Deputy Commander, CGETC
3	Counterpart for Education and Training (CGETC staff)
4	Counterpart for SAR and ATON (CGETC staff)
5	Counterpart for MARPOL & OSC (CGETC staff)
6	Counterpart for MARLEN (CGETC staff)
7	Staff for Management & Maintenance for Equipment and Facilities (CGETC staff)
8	Secretary (CGETC staff)

3. Implementation Structure of Counterpart Team in the Philippine side

The implementation set-up of Counterpart Team, PCG is shown as below.



4.3 Commitment expected of the Counterparts and the Philippine Government

The counterparts for Japanese long-term experts are supposed to assign continuously during 5 years of the whole Project period. With regards to financial commitment, PCG will operate sustainable management through appropriate budget allocation by the Philippine Government.

Chapter 5. Project Basic Design

See ANNEX 7.1 *PDM Version1*

5.1 Overall Goal '*Performance capability of PCG is improved*' (Overall goal in long-term)

Long-term overall goal stands for the goal expected to achieve in approximately 5 years after completion of the Project (2012 - 2013), which was identified as '*Performance capability of PCG is improved*' through the Workshop and the discussion. Technology transfer of the Project will enhance the performance capabilities of PCG so as to alleviate the great damage existing today in the Philippine Sea area. Three indicators will serve to evaluate the achievement.

Indicator1. Ratio of PCG SAR mission vis-à-vis maritime incidents on average of 2007 to 2011* is improved by 30% in comparison with that of 2002 to 2006*

Indicator2. Ratio of PCG MARPOL mission vis-à-vis MARPOL incidents on average of 2007 to 2011* is improved by 30% in comparison with that of 2002 to 2006*

Indicator3. Ratio of PCG MARLEN response vis-à-vis illegal activities on average of 2007 to 2011* is improved by 30% in comparison with that of 2002 to 2006*

< Remark: Concept of the indicators >

Ratio of PCG SAR mission is approximately 50% on average of 1990 to 2000. 'Improved by 30%' means to achieve 65% by 15% increase (50/100 to 65/100). It is commonly recognized in the world that in SAR mission for rescue needed vessels, Coast Guard participates in search and rescue services with patrol vessel, in coordination of SAR services, in deployment of tag-boat, and in collection and supply of SAR information etc. Japan Coast Guard, for instance, participates in above-mentioned SAR mission with the ratio of approximately 70%. While PCG has some plans for new water & air assets procurement and personnel increase, there are still several factors hindering from improving SAR mission outside of the Project with education and training enhancement; the wider-ranging of Philippine EEZ compared to Japanese, large sphere of PCG SAR duties, and impossibility of updated equipment supply to the job site in the Project, etc. Therefore, even though 'improvement by 30% of SAR mission' is not quite easy to be achieved, estimation of indicator is recognized appropriate since mitigation of maritime incidents through promoted prevention activities is considered as effective. Indicator 2 and 3 were also approached on the same concept.

5.2 Project Purpose '*PCG personnel with knowledge and skills to perform their functions are developed*'.

The project purpose expected to attain in the end of the Project was identified as '*PCG personnel with knowledge and skill to perform their duties appear in succession*' through the PCM Workshop and the discussion. The following two indicators will serve to evaluate the achievement.

Indicator 1. 2,050 PCG personnel are trained as specialists for SAR, ATON, MARPOL & OSC and MARLEN by the year 2007

Indicator 2. 450 other governmental and private organization are trained as specialists for SAR, ATON, MARPOL & OSC and MARLEN by the year 2007

[Remark: Concept of the indicators] **Indicators of the Project Purpose**

Projection of Trained Students and Participants Trained directly by the Project

Category	Module	CY	2004-05	2005-06	2006-07	
Basic Course	Coast Guard Officers Course (CGOC A, B)		90	90	25	
	Coast Guardsman Course (CGMC A, B)		160	160	160	
Specialization Course	Aids to Navigation Officer Course		30	30	30	
	Marine Environmental Protection Officer Course		30	30	30	
	Maritime Search & Rescue Coordination Officer Course		30	30	30	
	Maritime Law Enforcement Officer Course		-	80	80	
	Maritime Search & Rescue Petty Officer Course		80	80	80	
	Marine Environmental Protection Petty Officer Course		80	80	80	
	Maritime Aids to Navigation Petty Officer Course		80	80	80	
Advance Course	Coast Guard Command and Staff Courses (CGCSC)		25	25	25	
	Advance Management & Leadership course (ALMC)		40	40	40	
Other peculiar Course	Basic Scuba Divers Course		30	30	30	
	Anti-Sea jacking Course (CQB)		-	30	30	
	Light House Operations & Maintenance Package Course		30	30	30	
Net total of students (persons)			705	705	640	
Gross total of students (persons)			2,050			
Seminar		CY	2003-04	2004-05	2005-06	2006-07
Seminar	ATON related seminar		30	30	30	30
	MARPOL & OSC related seminar		30	30	30	30
	SAR related seminar		30	30	30	30
	MARLEN related seminar		-	30	30	30
Net total of participants (persons)			90	120	120	120
Gross total of participants (persons)			450			

Note: Above indicated number is estimation of students who are trained directly by the curriculum developed by the Project

Regarding future training plan, See ANNEX 7.11 Plan of PCG Training CGETC from 2002/03 to 2006/07

5.3 Outputs and Activities

Four outputs and its activities to attain the project purpose were identified through the PCM Workshop and the discussion.

5.3.1 Output-1 & Activities

Output 1. 'Education and training management system of CGETC is enhanced'

Activity to realize the output 1

1. To discuss the improvement of education and training managerial situation at CGETC

Indicator 1. Number of meetings held per year

5.3.2 Output-2 and its Activities

Output2. *'Training courses (SAR, ATON, MARPOL & OSC and MARLEN) at CGETC are improved'*

Activities to realize the output 2

- 2-1 To set-up and run the curriculum development committee
- 2-2 To define the concrete needs for education and training in the fields of SAR, ATON, MARPOL & OSC and MARLEN.
 - 1) To determine operating system and capability level of PCG
 - 2) To determine the required expertise level of PCG and its personnel
 - 3) To determine trainee's endowments/ expertise level of PCG incumbent/new recruited personnel
 - 4) To determine the concrete needs for education and training content/ level/ number of trainees
- 2-3 To examine IMO model course and discuss on the possibility of its adaptation to CGETC
- 2-4 To update or develop the curriculum and syllabus of courses
- 2-5 To develop textbooks and training aid materials of courses
- 2-6 To conduct instructor technical training for the counterparts and potential instructors.
- 2-7 To conduct the education and training courses for students at CGETC
- 2-8 To teach the operation and maintenance of equipment procured

Indicator 2-1. Completion of curriculum and syllabus developed or revised

Indicator 2-2. Completion of textbooks and materials developed

5.3.3 Output- 3 and its Activities

Output 3. *'Seminars (SAR, ATON, MARPOL & OSC and MARLEN) for the other governmental and private organization concerned are improved'*

Activities to realize the output 3

- 3-1 To conduct research so as to identify the seminar needs
- 3-2 To develop materials for seminars
- 3-3 To inform other governmental and private organizations concerned of the seminars offered by CGETC
- 3-4 To hold seminars
- 3-5 To draw up a plan of public awareness activities for companies and citizens in the fields of SAR, ATON, MARPOL & OSC, and MARLEN
- 3-6 To conduct public awareness activities for companies and citizens in the fields of SAR, ATON, MARPOL & OSC, and MARLEN

Indicator 1. Completion of educational materials for seminars

Indicator 2. Completion of material for public awareness and campaign

5.3.4 Output- 4 and its Activities

Output 4. *'Monitoring & Evaluation (M & E) system is established'*

Activities to realize the output 4

- 4-1 To discuss and identify the implementation schedule and person in-charge of M & E

- 4-2 To monitor progress of the Project once a year
- 4-3 To discuss on alteration needed for the Project design based on the monitoring
- 4-4 To evaluate jointly the project with JICA evaluation study team (midterm and final evaluations)

Indicator 4. M & E implementation schedule and its implementing records

5.4 Plan for Implementation of the Activities (Plan of Operation)

Basic time schedule to implement the activities of each output is tentatively summarized in Plan of operation (PO). The table will be examined and revised at the beginning of the Project. See *Annex 7.2 PO*.

5.5 Inputs

5.5.1 Input from Japanese side

5.5.1.1 Dispatch of Experts

Long-term Experts

The following five (5) Long-term experts will be dispatched for the Project.

- 1) Chief Advisor / Education and Training: One (1)
- 2) Experts for MARPOL & OSC: One (1)
- 3) Expert for SAR and ATON: One (1)
- 4) Expert for MARLEN: One (1)
- 5) Coordinator: One (1)

See *Annex 7.3 TOR for Japanese Long-term Experts*

Short-term Experts

Short-term experts will be dispatched as the need arises to ensure the smooth implementation of the Project.

5.5.1.2 Provision of Equipment

The following equipment will be procured for the Project;

- 1) Equipment and tools for SAR, ATON, MARPOL, OSC and MARLEN, 2) Computer related equipment,
- 3) Audio-visual education training equipment, and 4) Vehicle.

See *Annex 7.6. Equipment list*

5.5.1.3 Training in Japan

Counterpart training in Japan is one of effective and efficient measure to transfer the technology. 4 or 5 counterparts in the first year of the Project will be trained in Japan, approximately 20 counterparts in the 5 years project period.

5.5.2 Inputs from the Philippines

5.5.2.1 Staff Allocation

At least 2 counterparts in full-time as well as a secretary will be allocated for each Japanese expert.

See *Annex-7.4 TOR for Counterpart Personnel*

5.5.2.2 Facilities and Equipment

The implementing agency, PCG, will prepare the following facilities and equipment for the Project:

- 1) Existing facilities and equipment belonging to CGETC
- 2) Existing equipment belonging to the other units of PCG
- 3) Office for Japanese experts

5.5.2.3 Allocation of Budget

For the smooth implementation of the Project, both sides have confirmed that the Philippine side will allocate the budget for the following items of the Project.

- 1) Salaries and other allowances for the Philippine counterpart personnel
- 2) Expenses such as electricity, water, gas, fuel and other contingencies
- 3) Operational expenses for customs clearance, storage and domestic transportation for the equipment provided by the Japanese side.
- 4) Expenses for maintenance of facilities and equipment
- 5) Running expenses necessary for the implementation of the Project

5.6 Important Assumptions and Risks

It is noted that there are two essential components for human resources development; 1) to implement education and training, and 2) to recruit new staff. Adequate education and training of recruited staffs is essential measure together with personnel increase in order to meet the social demand against human resource shortage. Therefore, the important assumptions are; *'Recruitment of PCG personnel does not change dramatically as planned for the next five years'* to achieve the project purpose, and *'Training policies of PCG personnel do not change dramatically as planned for the next five years'* to realize the outputs.

Another risk is mentioned here as indicated in the Objective analysis; hardware improvement is expected together with educational system improvement to realize the overall goal, *'Performance capability of PCG is improved'*. There would be still a hindrance to conduct their duties in the case the operational rate of logistics and assets got worsen after fulfillment of capable personnel development with training and new recruitment. Therefore, *'Operational conditions of PCG sea & air assets do not deteriorate compared to the situation of the year 2002'* is indicated as one of assumptions to achieve the overall goal.

5.7 Prior Obligation and Prerequisite (pre-condition)

While Japanese government will cooperate and assist for the Project as a partnership, the implementing agency, PCG, will hold the ownership of the Project. Support by whole PCG personnel is the prerequisite to startup the Project.

Chapter 6. Impact of the Project

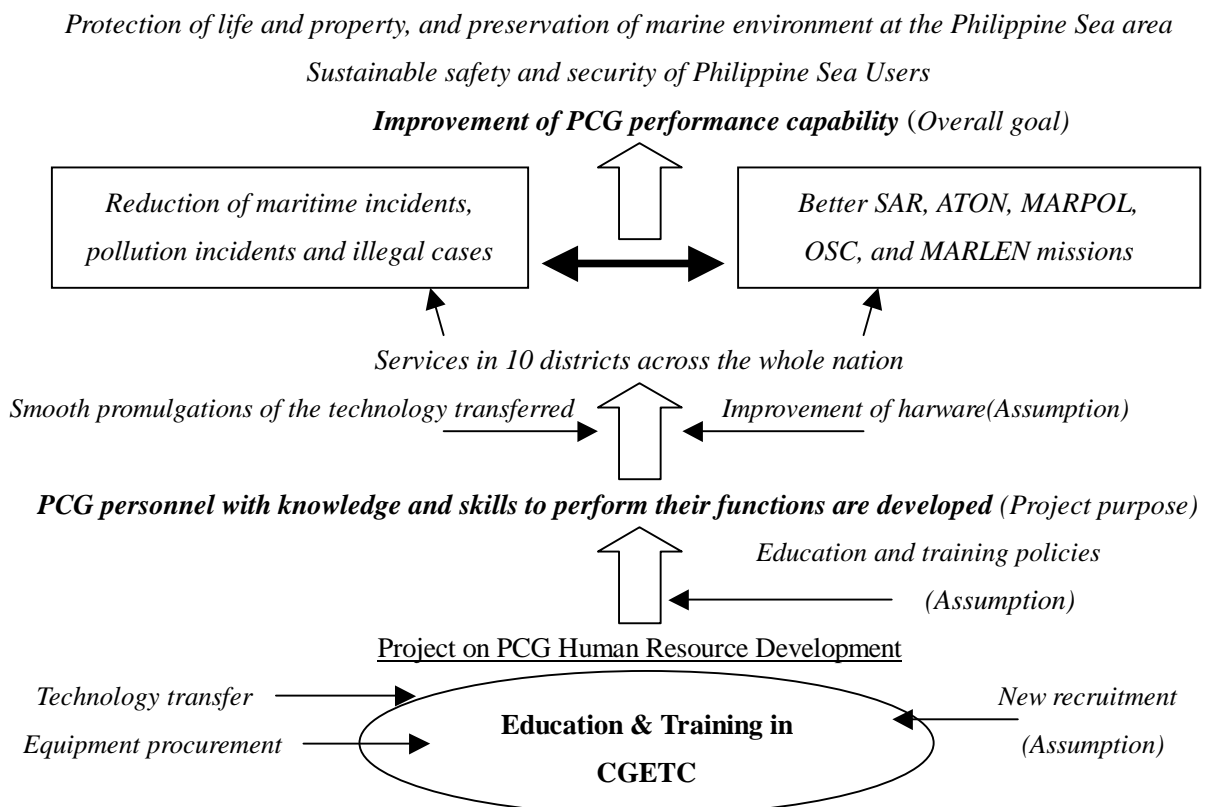
6.1 Positive Impact of the Project

6.1.1 Impact of the Project in Long-term

Taken in the broad sense, *'Impact of the Project'* means positive impact expected by the Project in long-term on the sector. Since all CGETC trainees/students are in-service personnel of PCG, feasibility to make full use of skills and knowledge transferred by the Project is assessed very high through practical use of the technology in the sector. Since PCG possesses 10 Districts, 52 Stations and 182 Detaches to offer their services, it is stressed that the technology will be disseminated smoothly over the nation.

Beneficiaries of the overall goal will be estimated at 3,480 PCG officers and EPs (based on the number of CY2001, excluding non-uniformed personnel, See *Chapter 3,3.1-3.'Functions and duties of PCG'*). Indirect beneficiaries in long-term after fulfillment of the overall goal will be users/passengers of the Philippine Sea area estimated at 55.4 millions (CY1999, See page 4 *'Trend of the Number of Passengers and Calling Vessels from 1994 to 1999'*).

Image of the Project Impact



6.1.2 Impact of the Project in the Project period

In narrow sense, Project impact means benefits from project purpose by examining the achievement of *'PCG personnel with knowledge and skills to perform their functions are developed'* (project purpose). Direct beneficiaries are estimated at 2,050 officers and EPs in 2007, and 450 participants in seminars will be expected. See *Chapter5, 5.2 'Project purpose'*.

6.2 Effectiveness of the Project

6.2.1 Rationalization of the Project Design and Planning

Issues of the sector had jointly analyzed by PCM method in the Workshop to draw out a rough concept of the Project. The concept has been jointly examined and revised through discussions in the Study by both sides so as to finalize logically the basic project design.

6.2.2 Suitability of the Project Purpose

The Project will enable PCG to develop capable personnel with skill and knowledge to perform their functions, through update/development of curriculum and textbook and equipment supply with updated technology from the Japanese side. Since it is urgently necessary to improve the education and training managerial system of CGETC, the suitability of the Project purpose is clearly recognized.

6.2.3 Availability of Technical level of Japan to assist the Recipient Country

Sustainable improvement of ratios of SAR mission, MARPOL mission and MARLEN mission vis-à-vis incidents and crimes will be expected at the Philippine Sea area through enhancement of PCG performance capability with transferred technology. Technical effectiveness is evident that Japan has a high and enough level of said technology of the sector so as to assist the Philippines through the Project.

6.3 Efficiency of the Project

6.3.1 Timing of Project Type Technical Cooperation

It is noted that this is an opportune moment to implement a technical cooperation project for PCG. As mentioned Chapter 1, all of Japanese cooperation to date for maritime related agencies have been conducted respectively by each function, depending on their critical needs to enhance their in-service activities of PCG and other aid-recipient agencies so as to meet domestic and international social demands. However, they were not enough for PCG to develop skilled personnel who would be able to fulfill their duties with appropriate capability, new comprehensive technical cooperation for human resource development have been expected. The Project will enable PCG to develop capable personnel, and timing appropriateness and efficiency of its implementation has been appraised.

6.3.2 Cost-Benefit of Inputs towards Outputs

Efficiency on cost-benefit from inputs towards outputs has been assessed. Direct benefits from activities will be the enhancement of education and training managerial system of CGETC aiming an effective technology transfer. Making the most of project inputs so as to implement effective education and training will realize enhancement of CGETC system. Suitable cost-benefit will be expected by the Project through human resource development of PCG as well as the other governmental and private agencies for the sector.

6.3.3. Economic Benefit in long-term

On the issue of current situation of great loss of life and property, and marine environmental pollution, estimated amount of loss due to those incidents was shown outstandingly great in Chapter 3 (See 3.2, '*Problems to be addressed for development*'). In the case the overall goal is achieved to prevent the

mentioned loss and damage, expected benefits in the long-term would be estimated very fruitful and high.

6.4 Relevance of the Project

6.4.1 Appropriateness of Japan's ODA

The Project will be the comprehensive *Technical Cooperation* to conduct the technology transfers in the fields of SAR, ATON, MARPOL & OSC and MARLEN for PCG personnel development. Technology of MARLEN that is a new field to be transferred by Japan's Official Development Assistance (ODA) to the Philippines, will be patrol skill, effective regulation for anti-illegal fishing, anti-illegal logging, anti-piracy and anti-smuggling, communication system, and rescue skills etc. None of said technologies will abuse human right but all of them will be applied by the civilian agency, PCG for maritime safety and security. Therefore, relevance of the Project within the scheme of Japan ODA is clear and the appropriateness of its implementation is evidently appraised.

6.4.2 Relations with Japan Aid's Policy for the Philippines

The Project has clear consistency with '*Improvement of Economical Infrastructure - Improvement of marine transportation infrastructure and maritime security*' in the framework of '*Japan Aid's Policy for the Philippines*'; the relevance of cooperation is clearly stressed.

6.4.3 Consistency with National Development Policy Framework of the Philippines

As mentioned in Chapter 2, the Project will assist the national policies indicated in MTPDP, NMP and ratified international conventions. Both of the project purpose and the overall goal have consistency with national policies and ratified international conventions, with BHN of Filipinos and Philippine Sea area users, and with needs of neighboring countries.

6.4.4 Participatory Design and Planning

It is stressed that the Implementing Agency PCG in collaboration with DOTC, NEDA and JICA Study Team had two-day Workshop in the HQS PCG and identified basic concept of the Project through analysis works of the sector; participation analysis, problem analysis, objective analysis and alternative analysis. Basic concept of the Project had been worked out through the Workshop and examined and revised through discussions. The basic project design has been finalized fundamentally in participatory method.

6.4.5 Establishment of the Monitoring and Evaluation System (M&E System)

M & E system mentioned here stands for the M & E of the PCM method introduced by JICA for every ODA project, which is distinguished from monitoring conducted by NEDA.

1) Monitoring

Counterparts shall monitor the activities of the Project in collaboration with Japanese team. To collect data for indicators of PDM (statistics of maritime incident, number of missions, number of certificated personnel, etc.) is one of important tasks in the supervising. Monitoring system serves to verify if the

Project goes on the direction planned and to find alteration needed out when some problems are recognized. Monitoring result shall be reported periodically in the coordination committee meeting.

2) Evaluation

JICA Evaluation Team will be dispatched to conduct joint evaluations with the Project Evaluation Team of Philippine side at least twice based on the 5 Evaluation Criteria (See ANNEX 7.7 'The Basic Concept of 5 Evaluation Criteria') by examining Monitoring result and other data. PDM is always used when evaluation so as to examine the project progress and attained result, it will also help to alter the project design if necessary. JICA Philippine Office will examine the project progress and development in 2~3 years after completion of the Project so as to assess the aftercare required. HQS JICA will dispatch the mission for aftercare and post-evaluation when necessary.

6.5 Sustainability of the Project

6.5.1 Institutional & Management Capacity of the Counterpart Organization

As explained in Chapter 3, PCG has developed its organization as a maritime agency that possesses today 10 Districts, 52 Stations and 182 Detaches nationwide with personnel of 3,982 since establishment in 1967 by Coast Guard Law. PCG has been undertaking Re-organization for the purpose of effective functioning and administrative capability enhancement after transferring to DOTC in 1998. The staff set-up and the personnel workforce are recognized stable, fundamental administrative and managerial capability of the organization is appraised for the smooth implementation of the Project.

6.5.2 Financial Condition

1. Actual and Current Operation and Program Budget of Implementing Agency, PCG

Since transferring to DOTC from DND, PCG is entitled to formulate and submit an annual budget proposal to the Department of Budget and Management (DBM) through the DOTC for the government's approval. As shown in the following table, Government budget for PCG has been increased for these 3 years.

Operational Program and Budget of PCG				(Unit: Pesos)
Item	1999Actual	2000Actual	2001Actual	2002Current
1) Personnel Services				
01-Personnel Services net total	655,681,000	718,050,000	711,230,000	792,460,000
2) Maintenance and Operating Expense				
02- Traveling Expenses	3,272,000	4,107,000	3,500,000	9,040,000
03- Communication Services	3,770,000	3,848,000	4,148,000	5,000,000
04- Repair & Maintenance of Facilities	34,231,000	35,005,000	71,077,000	25,562,000
05- Repair & Maintenance of Equipment	10,473,000	95,921,000	61,497,000	71,105,000
06- Transportation Services	30,000	275,000	200,000	776,000
07- Supplies and Materials	61,749,000	96,274,000	60,000,000	109,395,000

08- Rents	342,000	277,000	400,000	876,000
14- Water, illumination and power	10,192,000	11,324,000	13,081,000	24,217,000
15- Social security, benefits, rewards etc	1,614,000	9,751,000		
17- Training & Seminars Expenses	197,000	211,000	572,000	642,000
18- Extraordinary Expenses, etc		332,000	647,000	647,000
19- Confidential & Intelligence	400,000	400,000		400,000
20- Anti-insurgency expenses	500,000			
21- Taxes, Duties	8,000	426,000	100,000	300,000
23- Gasoline, Oil and Lubricants	23,308,000	44,195,000	51,095,000	84,556,000
24- Fidelity Bonds & Ins Premiums		400,000	347,000	777,000
29- Other Services		7,724,000	8,248,000	12,578,000
Sub total	244,591,000	310,020,000	274,912,000	345,871,000
3) Capital Outlays				
36- Fur, Fix, Equipment & Books Outlays	69,931	89,266,000	30,000,000	37,000,000
Grand total	970,203,000	1,117,336,000	1,016,142,000	1,175,331,000

Source: PCG, March 2002

With the current trend of stable budgetary allocation from the Government as shown in the above OPB table, PCG can support and sustain the operation and management of the Project. Although there is a slight decrease in the 2001 budget, one of the priorities and concentration in the budgetary support is forwards the enhancement of education and training activities as shown in the following two tables.

Whole Education and Training Budget in PCG (Unit: Pesos)

Item	1999Actual	2000Actual	2001Actual	2002Current
2) Maintenance and Operating Expense				
02-Traveling Expenses	930,500	1,586,000	1,667,500	1,134,682
07-Supplies and Materials	2,043,900	2,534,000	3,450,000	6,780,016
17-Training & Seminar Expense	385,000	220,000	382,500	570,500
29-Other Services	1,690,600	1,867,000	1,617,000	1,615,500
Sub total	5,048,001	6,205,000	7,114,999	10,100,698
3) Capital Outlays				
36- Fur, Fix, Equipment & Books Outlays	500,000	534,000	3,000,000	3,000,000
Grand total	5,548,001	6,739,000	10,114,999	13,100,698

Source: PCG, March 2002,

Note : Personal services, water and electricity carried under HPCG

Operational Program and Budget of CGETC (Unit: Pesos)

Item	1999Actual	2000Actual	2001Actual	2002Current
1) Personnel Services	n.a	20,000	32,000	32,000
2) Maintenance and Operating Expense*	n.a	312,000	4,253,000	8,806,000
3) Capital Outlays	n.a	1,772,000	3,000,000	3,000,000
Grand total	718,000	2,104,000	7,253,000	11,838,000

Source: PCG, March 2002,

Note: The budget reflected under Personnel Services is a direct fund support to CGETC on Mobile & Welfare, Rent and Recreation activities of CGETC personnel. HQS PCG carries Salaries, water and electricity.

The upgrading from CGTC gave CGETC a broader scope in terms of the number of personnel; CGETC is now entitled to have more personnel with a support of substantial government budget allocation for PCG. The Project effect is concluded sustainable to promote the transfer of technology.

2.Planned Operation and Program Budget of Implementing Agency, PCG

Planned POPB of PCG, POPB of CGETC and Tentative Budget for the Project are shown as below.

Planned Operational Program and Budget of PCG (Unit: Pesos)

Item	2003Planned	2004 Planned	2005 Planned	2006 Planned	2007 Planned
1) Personnel Services	1,341,128,902	1,695,620,400	2,196,090,314	2,415,699,346	2,657,269,280
2) M.O. Expense	473,124,250	557,367,907	659,773,961	768,785,319	893,678,676
3) Capital Outlays	374,000,000	140,000,000	100,000,000	70,000,000	50,000,000
Grand total	2,188,253,152	2,392,988,307	2,955,864,275	3,254,484,665	3,600,947,956

Source: PCG, March 2002,

It is noted that Personnel Services and M&O Expense of CGETC are planned to increase and sustainable even if whole budget is envisioned to be decrease as shown below, since Capital Outlays will be decreased year by year along with progress of the environmental improvement at CGETC.

Planned Operational Program and Budget of CGETC (Unit: Pesos)

Item	2003Planned	2004 Planned	2005 Planned	2006 Planned	2007 Planned
1) Personnel Services	85,120	128,531	158,093	140,703	157,587
2) M.O. Expense	23,509,080	35,370,180	43,505,321	38,719,736	43,366,104
Net total	23,509,080	35,498,711	43,663,414	38,860,439	43,523,691
3) Capital Outlays	300,000,000	100,000,000	50,000,000	20,000,000	5,000,000
Grand total	323,509,080	135,498,711	93,663,414	58,860,439	48,523,691

Source: PCG, March 2002,

Remark: 1) It does not include Salaries of personnel assigning at CGETC including assigned personnel to the Project, as Salaries of personnel are funded from HQS PCG.

2) HQS PCG carries Repaire & Maintenance of Equipment, Water, illumination and power, Taxes,

Duties & Fees. Capital Outlays and other necessary expenses for the Project.

3) Tentative Budget for the Project including special project budget (apart from the above POB CGET):

Item	July 2002 ~	2003	2004	2005	2006	~July 2007
Personnel Salaries assigned	2,400,000	2,64,000	2,900,000	3,200,000	3,500,000	3,865,224
Maintenance & Operation	905,000	3,557,000	1,295,000	1,290,000	1,329,000	145,500
Grand total	3,305,000	3,821,000	4,195,000	4,490,000	4,829,000	4,010,724

Note: Water, electricity are carried under HQS PCG,

Capital Outlays for the Project is funded from POB of CGETC when necessary.

6.5.3 Socio-cultural Aspect

There is none of negative impacts on socio-cultural aspect founded through the Preparatory Study. With regard to Gender Issue, PCG has been introduced the Gender and Development Plan by GAA so as to develop female personnel, it is noted that the Project will assist PCG gender policy indirectly.

6.5.4 Environmental Aspect

Whole the equipment procured for the Project will generate no negative impact on environment. Improvement of CGETC educational system will support directly to marine environment preservation, especially through MARPOL & OSC technology.

6.5.5 Technical appropriateness

All the technologies transferred through the Project, i.e. SAR, ATON, MARPOL & OSC and MARLEN, are essential for PCG to fulfill their duties, and their enhancement have been demanded by neighboring countries to realize maritime security, safety and environmental preservation around the Philippines. Those mentioned technologies will be transferred directly to PCG as well as to the other government and private agencies indirectly. Since they will be utilized practically in great need in long-term, technical appropriateness for transfer is evident and appraised.

6.6 Summary of the Ante-evaluation of the Project under the 5 evaluation criteria

As above explained so far, examination of the Project have been conducted based on the 5 evaluation criteria; 1) Impact, 2) Effectiveness, 3) Efficiency, 4) Relevance and 5) Sustainability, and the relevance of the Project implementation has highly appraised.

Chapter 7. ANNEX

7.1 Project Design Matrix: PDM Version 1

7.2 Plan of Operation: PO (tentative)

7.3 TOR for Japanese Long-term Experts

7.4 TOR for the Counterpart Personnel

7.5 Outcomes of the PCM Workshop

7.6 Equipment List

7.7 The Basic Concept of the 5 Evaluation Criteria

7.8 Map of Districts, Stations and Dispatches of PCG in the Philippines

7.9 Former PCG Headquarters and Staff Organization

7.10 Acronym of Proposed PCG Organizational Chart

7.11 Plan of PCG Training in CGETC from 2002 to 2007

Project area: Whole nation of the PhilippinesTarget group: The Philippine Sea Area UserProject period: 1 July 2002 ~ 30 June 2007

Narrative Summary of the Project	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p>Overall goal</p> <p>Performance capability of PCG is improved</p>	<p>1. Ratio of PCG SAR mission vis-à-vis maritime incidents on average of 2007 to 2011* is improved by 30% in comparison with that of 2002 to 2006*</p> <p>2. Ratio of PCG MARPOL mission vis-à-vis MARPOL incidents on average of 2007 to 2011* is improved by 30 % in comparison with that of 2002 to 2006*</p> <p>3. Ratio of PCG MARLEN response vis-à-vis illegal activities on average of 2007 to 2011* is improved by 30% in comparison with that of 2002 to 2006*</p>	<p>Statistics of the Project survey team</p> <p>Maritime Incident Report: DOTC</p> <p>Major marine accidents: PCG MARPOL Incident: MEPCON Coast Guard Action Center</p>	
<p>Project purpose</p> <p>PCG personnel with knowledge and skills to perform their functions are developed.</p>	<p>1. 2,050 PCG personnel are trained as specialists for SAR, ATON, MARPOL & OSC and MARLEN by the year 2007</p> <p>2. 450 other governmental and private organization are trained as specialists for SAR, ATON, MARPOL & OSC and MARLEN by the year 2007</p>	<p>1. Course completion records of the CGETC</p> <p>2 Seminar completion records of the CGETC</p>	<p>The operational conditions of PCG sea & air assets do not deteriorate compared to the situation of the year 2001</p>
<p>Outputs</p> <p>1. Education and training management system of CGETC is enhanced.</p> <p>2. Training courses (SAR, ATON, MARPOL & OSC and MARLEN) at CGETC are improved.</p> <p>3. Seminars (SAR, ATON, MARPOL & OSC and MARLEN) for the other governmental and private organization concerned are improved</p> <p>4. Monitoring & Evaluation system is established</p>	<p>1-1. Number of meetings held per year</p> <p>2-1. Completion of curriculum and syllabus developed or revised</p> <p>2-2. Completion of textbooks and materials developed</p> <p>3-1. Completion of educational materials for seminars</p> <p>3-2. Completion of materials for public awareness and campaign</p> <p>4 -1. M & E implementation schedule and its implementing records</p>	<p>1. Minutes of meetings</p> <p>2. Curriculum and textbooks of courses</p> <p>3. Material for seminar and public awareness</p> <p>4. Table of M & E with implementation records</p>	<p>Training policies of PCG personnel do not change dramatically as planned for the next five years</p>

(Continued to the following page) Note: * Statistical year

<p>Activities</p> <p>1 To discuss the improvement of education and training managerial situation at CGETC</p> <p>2-1 To set-up and run the curriculum development committee</p> <p>2-2 To define the concrete needs for education and training in the fields of SAR, ATON, MARPOL & OSC and MARLEN</p> <p>1) To determine the operating system and capability level of PCG</p> <p>2) To determine the required expertise level of PCG and its personnel</p> <p>3) To determine trainee’s potentials/expertise level of PCG incumbent/new recruited personnel</p> <p>4) To determine the concrete needs for education and training content /level/number of trainees</p> <p>2-3 To examine IMO model course and discuss on the possibility of its adaptation to CGETC</p> <p>2-4 To update or develop the curriculum and syllabus of courses</p> <p>2-5 To develop textbooks and training aid materials of courses</p> <p>2-6 To conduct instructor technical training for the counterparts and potential instructors</p> <p>2-7 To conduct the education and training courses for students at CGETC</p> <p>2-8 To teach operation and maintenance equipment procured</p> <p>3-1 To conduct the needs research for seminars</p> <p>3-2 To develop materials for seminars</p> <p>3-3 To inform other governmental and private organizations concerned of the seminars offered by CGETC</p> <p>3-4 To hold seminars</p> <p>3-5 To draw up a plan of public awareness activities for companies and citizens in the fields of SAR, ATON, MARPOL & OSC and MARLEN</p> <p>3-6 To conduct public awareness activities for companies and citizens in the fields of SAR, ATON, MARPOL & OSC and MARLEN</p> <p>4-1 To discuss and identify the implementation schedule and person in-charge of M & E</p> <p>4-2 To monitor progress of the Project once a year</p> <p>4-3 To discuss on alteration needed for the Project design based on the monitoring</p> <p>4-4 To evaluate jointly the project with JICA evaluation study team (midterm and final evaluations)</p>	<p style="text-align: center;">Inputs</p> <p>< Philippine side ></p> <p>[Personnel]</p> <p>Counterpart: At least 2 persons for each Japanese expert</p> <p>Secretary for Japanese experts: 1 person</p> <p>[Facility and equipment]</p> <p>Existing facilities and equipment belonging to the CGETC</p> <p>Existing equipment belonging to other PCG units.</p> <p>Offices for Japanese experts</p> <p>[Finance]</p> <p>Salaries for PCG personnel</p> <p>Operation cost</p> <p>[Others]</p> <p>Authority concerned : DOTC</p> <p>Implementing agency : PCG</p> <p>Project Director:</p> <p>Deputy Commandant for Administration, PCG</p> <p>Project Manager:</p> <p>Commander, CGETC</p>	<p>< Japanese side ></p> <p>[Personnel]</p> <p>Long-term expert : 5 persons</p> <p>Chief Advisor/Education and Training</p> <p>MARPOL & OSC</p> <p>SAR and ATON</p> <p>MARLEN</p> <p>Coordinator</p> <p>Short-term expert</p> <p>(when necessary): 3 ~ 4 persons,</p> <p>Expert for SPECIAL RESCUE</p> <p>Expert for MARPOL</p> <p>[Training in Japan]</p> <p>Approximately 20 persons in the 5 years</p> <p>[Equipment]</p> <p>Equipment & tools for SAR, ATON, MARPOL, OSC , and MARLEN</p> <p>Computer related</p> <p>Audio-Visual Training</p> <p>Equipment:</p> <p>Vehicle</p> <p>[Facility]</p> <p>Special measures for physical infrastructure development</p>	<p>Recruitment of PCG personnel does not change dramatically as planned for the next five years</p> <hr/> <p>Pre-conditions</p> <p>PCG personnel support the Project</p>
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ANNEX 7.2 PLAN OF OPERATION (PO)

Date: March 2002

Project title: The Project on Philippine Coast Guard Human Resource Development

Project Period: 1 July 2002 ~ 30 June 2007

1/1

Activities	2002	2003	2004	2005	2006	2007
	July	July	July	July	July	July
1 To discuss the improvement of education and training managerial situation at CGETC	—————▶					
2-1 To set-up and run the curriculum development committee	▶					
2-2 To define the concrete needs for education and training in the fields of SAR, ATON, MARPOL & OSC and MARLEN	—————▶					
2-3 To examine IMO model course and discuss on the possibility of its adaptation to CGETC	—————▶					
2-4 To update or develop the curriculum and syllabus of courses		—————▶				
2-5 To develop textbooks and training aid materials of courses		—————▶			
2-6 To conduct instructor technical training for the counterparts and potential instructors		—————▶			
2-7 To conduct the education and training courses for students at CGETC		—————▶			
2-8 To teach operation and maintenance of equipment procured		—————▶			
3-1 To conduct research so as to identify the seminar needs	—————▶					
3-2 To develop materials for seminars		—————▶			
3-3 To inform other governmental and private organizations concerned of the seminars offered by CGETC		—————▶			
3-4 To hold seminars		—————▶			
3-5 To draw up a plan of public awareness activities for companies and citizens in the fields of SAR, ATON, MARPOL & OSC and MARLEN	—————▶					
3-6 To conduct public awareness activities for companies and citizens in the fields of SAR, ATON, MARPOL & OSC and MARLEN		—————▶			
4-1 To discuss and identify the implementation schedule and person in charge of M & E						
4-2 To monitor progress of the Project once a year						
4-3 To discuss on alteration needed for the Project design based on the monitoring						
4-4 To evaluate jointly the project with JICA evaluation study team (midterm and final evaluations)						

Terms of Reference
Japanese Long-term Expert on
Chief Advisor/Education & Training for
The Project on Philippine Coast Guard Human Resource Development

Objective

The long-term expert who takes in charge of Chief Advisor in coast guard field is expected to assign to Coast Guard Education and Training Command (CGETC) to improve the education and training system of CGETC for human resource development of Philippine Coast Guard (PCG). The Chief Advisor will supervise the management of the Project progress based on the technical aspect of the coast guard field. The Chief Advisor will serve concurrently an expert on Education and Training so as to examine the situation of education and training at CGETC for smooth implementation of the Project.

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To supervise on the management of the Project progress
- 2) To act as advisor to the Project Director and the Project Manager in his capacity as the Chief Advisor
- 3) To understand the development of the Project and give advice to the other team members
- 4) To develop and evaluate the course design and curriculum
- 5) To provide guidance for the technology transfer jointly with counterparts and other long-term experts in order to improve the educational system

Qualification

- 1) Age: more than 30 years old
- 2) Academic background: Bachelor Degree or equivalent
- 3) Communication ability: Proficiency in written and oral English communication

Terms of Reference
Japanese Long-term Expert on
Marine Pollution Prevention & Oil Spill Combating for
The Project on Philippine Coast Guard Human Resource Development

Objective

The long-term expert who specializes in Marine Pollution Prevention & Oil Spill Combating (MARPOL & OSC) is expected to assign to Coast Guard Education and Training Command (CGETC) to transfer technology so as to develop the human resource of Philippine Coast Guard (PCG). In cooperation with counterparts, the expert will take charge of providing assistance to evaluate and develop the special technology in terms of MARPOL & OSC courses offered in CGETC.

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To comprehend the present educational system and evaluate the course curriculum and materials of CGETC as a MARPOL & OSC specialist
- 2) To understand the technology level of CGETC/PCG and the current situation and development policy in this field in the Philippines
- 3) To design the improvement plan to update the educational training of CGETC and transfer the technology jointly with counterpart and other experts in order to improve the educational system

Qualification

Age: more than 30 years old

Academic background: Bachelor Degree or equivalent

Communication ability: Proficiency in written and oral English communication

Terms of Reference
Japanese Long-term Expert on
Search and Rescue & Aids to Navigation for
The Project on Philippine Coast Guard Human Resource Development

Objective

The long-term expert who specializes in Search and Rescue & Aids to Navigation (SAR & ATON) is expected to assign to Coast Guard Education and Training Command (CGETC) to transfer technology so as to develop the human resource of Philippine Coast Guard (PCG). In cooperation with counterparts, the expert will take charge of providing assistance to evaluate and develop the special technology in terms of SAR & ATON courses offered in the CGETC.

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To comprehend the present educational system and examine the course curriculum and materials of CGETC as an SAR & ATON specialist
- 2) To understand the technology level of CGETC/PCG and the current situation and development policy in this field in the Philippines
- 3) To design the improvement plan to update the educational training of CGETC and transfer the technology jointly with counterparts and other experts in order to improve the educational system

Qualification

Age: more than 30 years old

Academic background: Bachelor Degree or equivalent

Communication ability: Proficiency in written and oral English communication

Terms of Reference
Japanese Long-term Expert on
Maritime Law Enforcement for
The Project on Philippine Coast Guard Human Resource Development

Objective

The long-term expert who specializes in Maritime Law Enforcement (MARLEN) is expected to assign to Coast Guard Education and Training Command (CGETC) to transfer technology so as to develop the human resource of Philippine Coast Guard (PCG). In cooperation with counterparts, the expert will take charge of providing assistance to evaluate and develop the special technology in terms of MARLEN courses offered in CGETC.

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To comprehend the present educational system and evaluate the course curriculum and materials of CGETC as an MARLEN specialist
- 2) To understand the technology level of CGETC/PCG and the current situation and development policy of this field in the Philippines
- 3) To design the improvement plan to update the educational training of CGETC and transfer the technology jointly with counterparts and other experts in order to improve the educational system

Qualification

Age: more than 30 years old

Academic background: Bachelor Degree or equivalent

Communication ability: Proficiency in written and oral English communication

**Terms of Reference
Coordinator on
The Project on Philippine Coast Guard Human Resource Development**

Objective

The long-term expert who will be a Coordinator is expected to assign to Coast Guard Education and Training Command (CGETC) to transfer technology so as to develop the human resource of Philippine Coast Guard (PCG). The coordinator will assist the Chief Advisor of the Japanese side and act as liaison between the Philippine side and the Japanese side for the smooth implementation of the Project.

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To assist the Chief Advisor in terms of the management of the Project
- 2) To conduct the tasks necessary for the procurement or arrangements with regards to the Project Inputs
- 3) To implement the monthly budget plans and manage accounting tasks in his function as an accountant for the Project
- 4) To act in coordination with the Philippine side and the Japanese side, the JICA Philippine Office and the Japanese Ambassador in the Philippines, etc.

Qualification

Age: more than 30 years old

Communication ability: Proficiency in written and oral communication in English

Others: Knowledge of the Filipino Language, Tagalog, would be an asset

**Terms of Reference
Counterpart for
Japanese Long-term Expert on
Chief Advisor/ Education & Training for
The Project on Philippine Coast Guard Human Resource Development**

Objective

The counterpart who specializes in educational planning and training in coast guard field is expected to assign to Coast Guard Education and Training Command (CGETC) to work jointly with the Japanese Long-term Expert of Education & Training in the transfer of technology so as to develop the human resource of Philippine Coast Guard (PCG).

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To give advice to the Education & Training long-term expert
- 2) To supervise the development of the Project and give advice to the other team members
- 3) To develop and evaluate the course design and curriculum
- 4) To provide guidance for the technology transfer jointly with other counterparts and Japanese experts in order to improve the educational system

Qualification

- 1) Academic background: Baccalaureate or higher
- 2) Communication ability: Proficiency in written and oral English communication
- 3) Rank: 1. Officer; Lieutenant and above
2. Non-Commissioned Officer: Petty Officer First Class and above

**Terms of Reference
Counterpart for
Japanese Long-term Expert on
Marine Pollution Prevention & Oil Spill Combating for
The Project on Philippine Coast Guard Human Resource Development**

Objective

The counterpart who specializes in Marine Pollution Prevention & Oil Spill Combating (MARPOL & OSC) is expected to assign to Coast Guard Education and Training Command (CGETC) to work jointly with the Japanese Long-term Expert of Marine Pollution Prevention & Oil Spill Combating in the transfer of technology so as to develop the human resource of Philippine Coast Guard (PCG).

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To evaluate the present educational system, the course curriculum and materials of CGETC jointly with the long-term experts
- 2) To comprehend the technology level of CGETC/PCG in terms of MARPOL & OSC
- 3) To design the improvement plan to update the educational training of CGETC and transfer the technology jointly with other counterpart and Japanese experts in order to improve the educational system

Qualification

- 1) Academic background: Baccalaureate or higher
- 2) Communication ability: Proficiency in written and oral English communication
- 3) Rank: 1. Officer; Lieutenant and above
2. Non-Commissioned Officer; Petty Officer First Class and above

**Terms of Reference
Counterpart for
Japanese Long-term Expert on
Search and Rescue and Aids to Navigation for
The Project on Philippine Coast Guard Human Resource Development**

Objective

The counterpart who specializes in Search and Rescue & Aids to Navigation (SAR & ATON) is expected to assign to Coast Guard Education and Training Command (CGETC) to work jointly with the Japanese Long-term Expert of Search and Rescue and Aids to Navigation in the transfer of technology so as to develop the human resource of Philippine Coast Guard (PCG).

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To comprehend the present educational system and examine the course curriculum and materials of CGETC with the assistance of the Japanese expert
- 2) To comprehend the technology level of CGETC/PCG in terms of SAR & ATON
- 3) To design the improvement plan to update the educational training of CGETC and transfer the technology jointly with other counterparts and Japanese experts in order to improve the educational system

Qualification

- 1) Academic background: Baccalaureate or higher
- 2) Communication ability: Proficiency in written and oral English communication
- 3) Rank: 1. Officer; Lieutenant and above
2. Non-Commissioned Officer; Petty Officer First Class and above

**Terms of Reference
Counterpart for
Japanese Long-term Expert on
Maritime Law Enforcement for
The Project on Philippine Coast Guard Human Resource Development**

Objective

The counterpart who specializes in Maritime Law Enforcement (MARLEN) is expected to assign to Coast Guard Education and Training Command (CGETC) to work jointly with the Japanese Long-term Expert of Maritime Law Enforcement in the transfer of technology so as to develop the human resource of Philippine Coast Guard (PCG).

Job Description

Location: Coast Guard Education and Training Command (CGETC), PCG

Proponent: PCG and JICA

Job Period: 5 years

Specific Tasks

- 1) To evaluate the present educational system and examine the course curriculum and materials of CGETC with the assistance of the Japanese expert
- 2) To comprehend the technology level of CGETC/PCG in terms of MARLEN
- 3) To design the improvement plan to update the educational training of CGETC and transfer the technology jointly with other counterparts and Japanese experts in order to improve the educational system

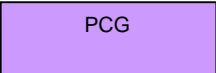
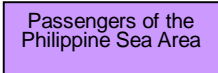
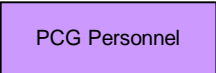
Qualification

- 1) Academic background: Baccalaureate or higher
- 2) Communication ability: Proficiency in written and oral English communication
- 3) Rank: 1. Officer; Lieutenant and above
2. Non-Commissioned Officer; Petty Officer First Class and above

 Target group tentatively selected

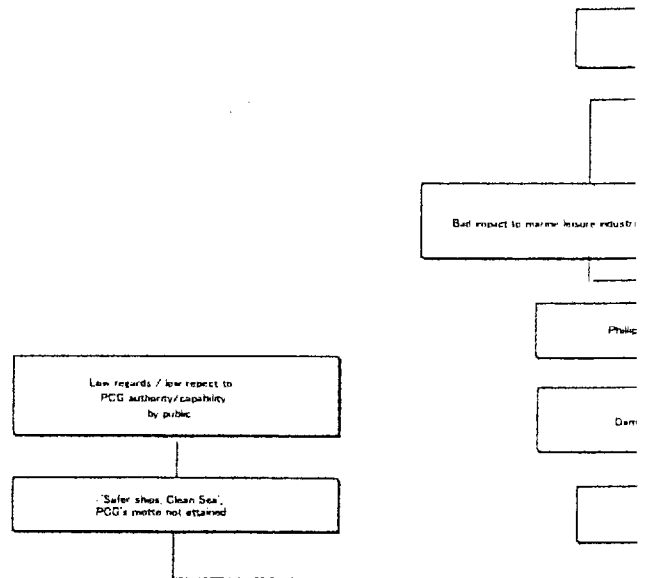
PARTICIPATION ANALYSIS

55

BENEFICIARIES		SUPPORTING GROUPS		AFFECTED GROUPS	IMPLEMENTING AGENCIES	DECISION MAKERS	FUNDING AGENCIES
 PCG	 Passengers of the Philippine Sea Area	NEDA	MOFA, Japan	Other Maritime Training School/Center	PCG	PCG	PCG
Students/Trainees	Riding Public	M. T. Council	Embassy of Japan	Private Training Center	CGTC	DOTC	DOTC
Aids to Navigation Command	Seafarers	PNP MARICOM	JICA Headquarter	Substandard Ships		NEDA	Government of the Philippines
PCG Inspector/Surveyor	Shipping Company	TESDA	JICA Philippines Office	Persons Engaged in Illegal Activities		Government of the Philippines	JICA
 PCG Personnel	Domestic Shipping	Law Enforcement Agencies	JCG	Oil Spiller		JICA	Government of Japan
Lighthouse Keepers	Foreign Ships Calling Philippine Port	Local Government Units	JCG Academy	Terrorist			
NOCOP	Oil Industry	PCGA		"YAKUZA"			
CHED	Local Populace Dependent on the Sea for Livelihood	NGOs					
MARINA	Ordinary Citizens	Business Sector					
EMB - DENR							

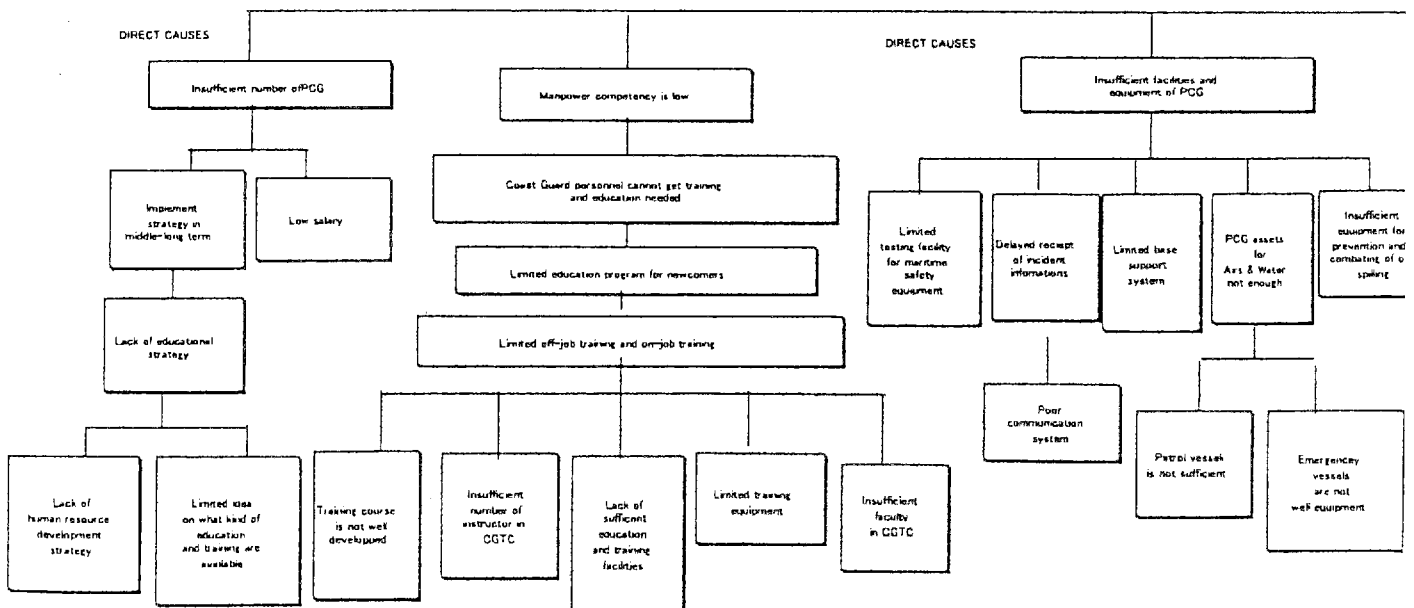
Problem Tree by Problem Analysis 1/4

DIRECT EFFECTS

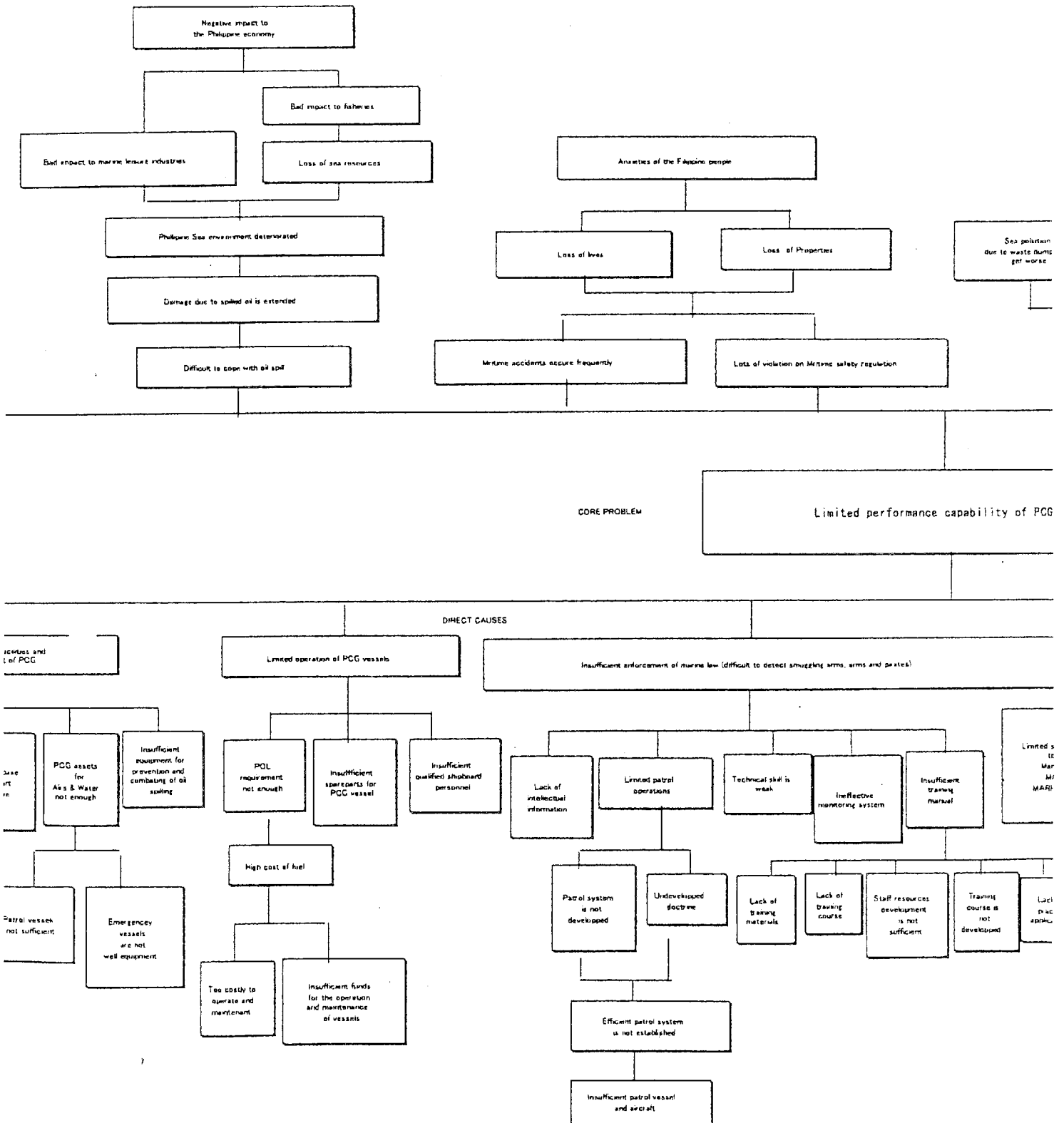


DIRECT CAUSES

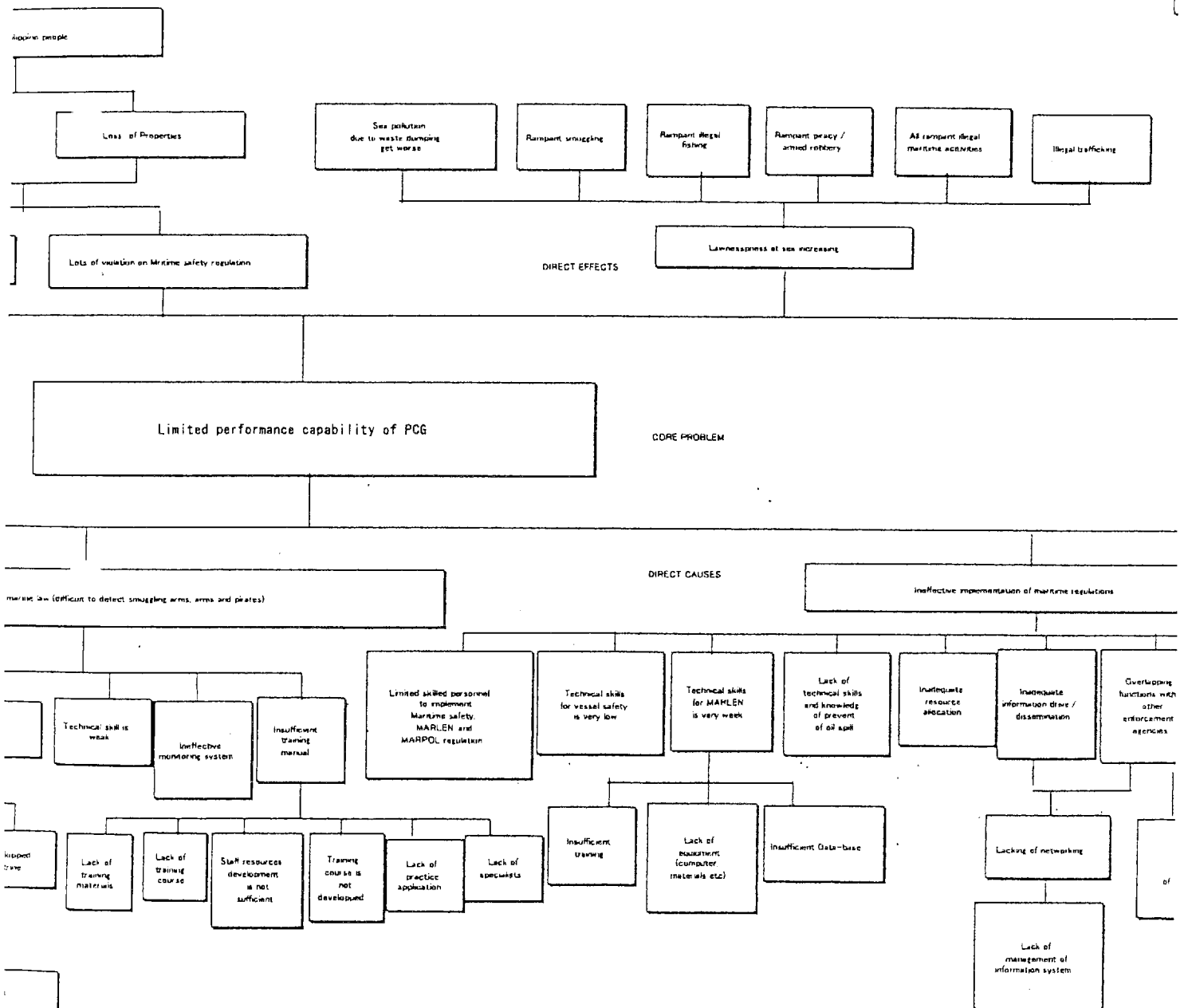
DIRECT CAUSES



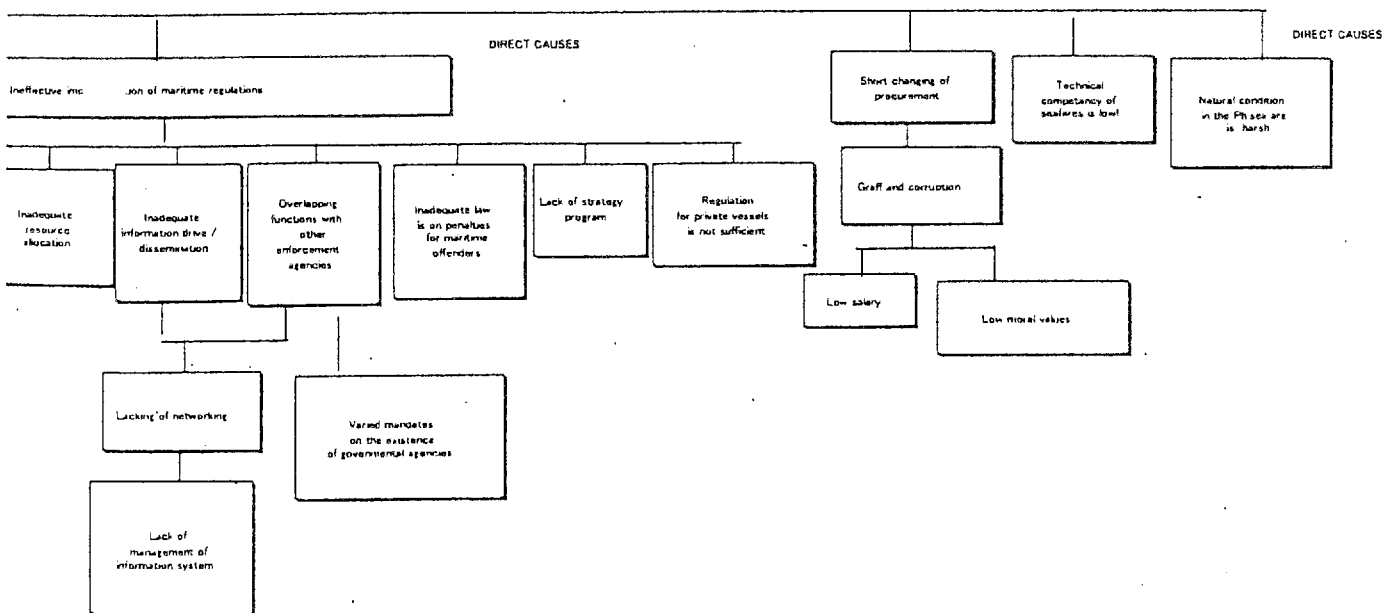
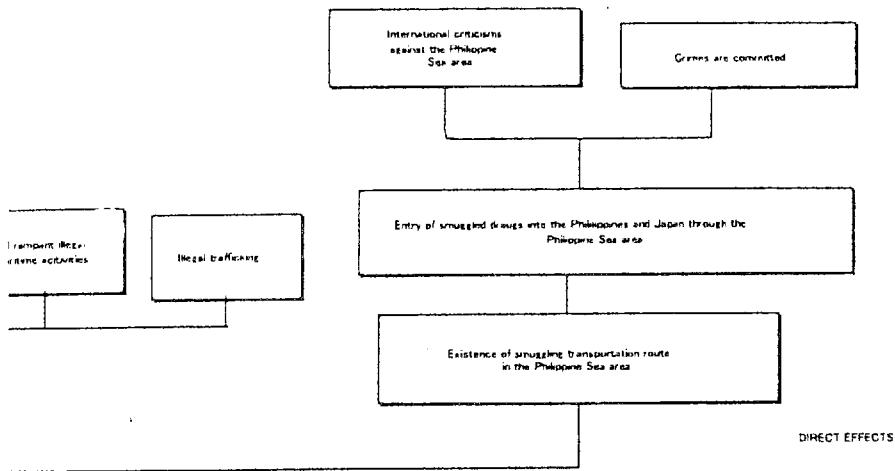
Problem Tree by Problem Analysis 2/4



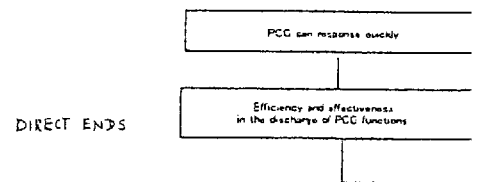
Problem Tree by Problem Analysis 3/4



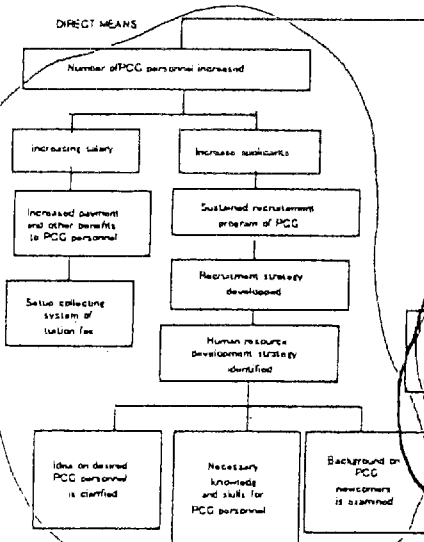
Problem Tree by Problem Analysis 4/4



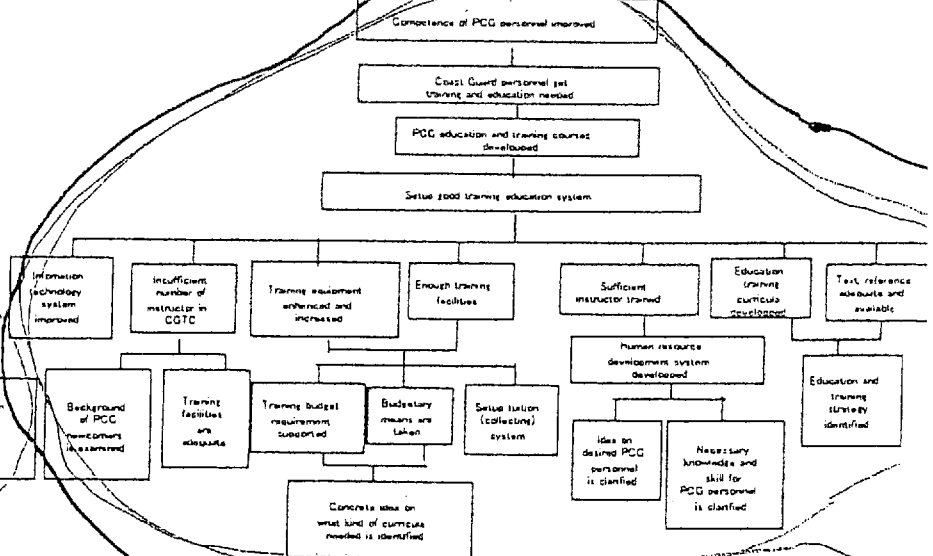
Objective Tree by Objective Analysis and Alternative Analysis 1/4



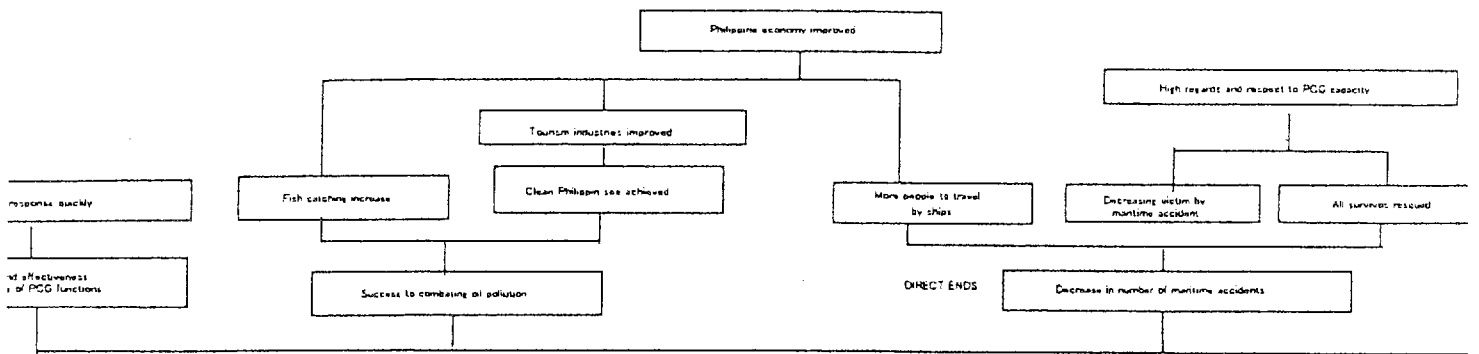
A. Recruitment Approach



B Human Resource Training Approach

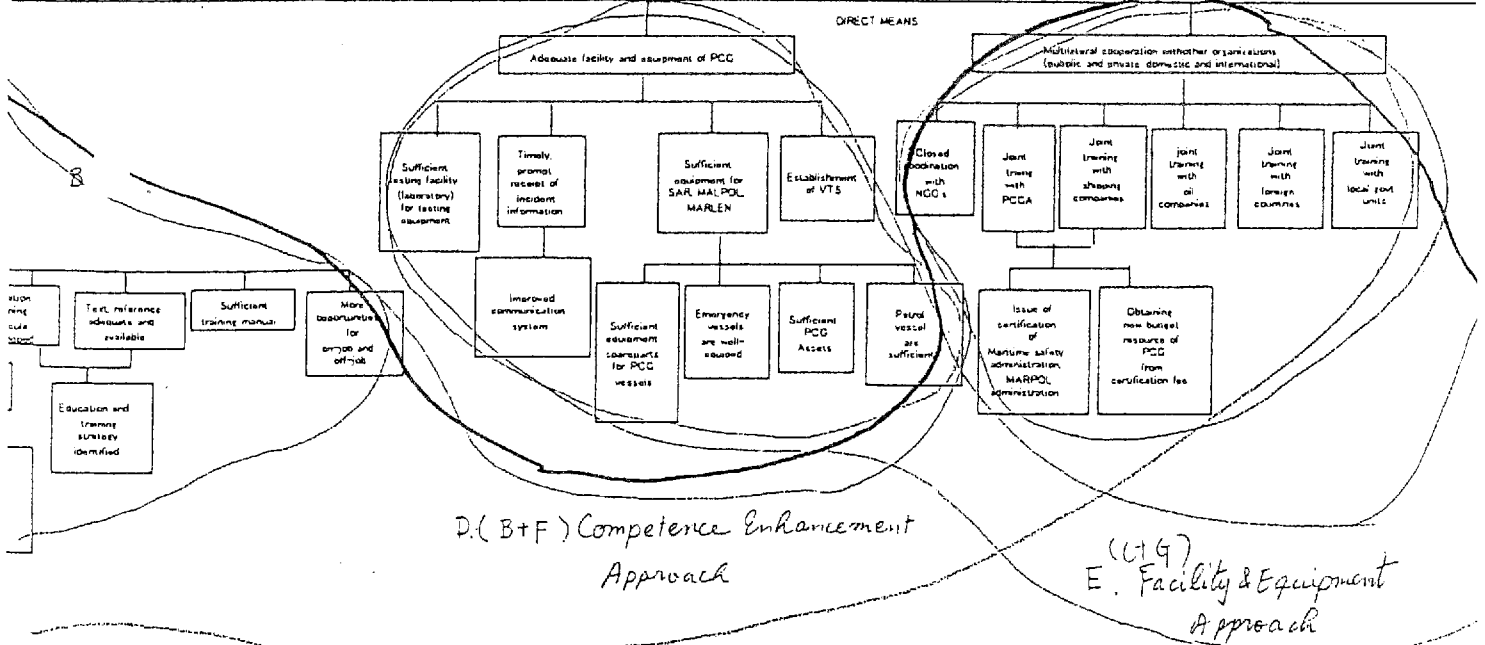


PC& Performance Capability Enhancement Approach



C. Facilities Enhancement Approach

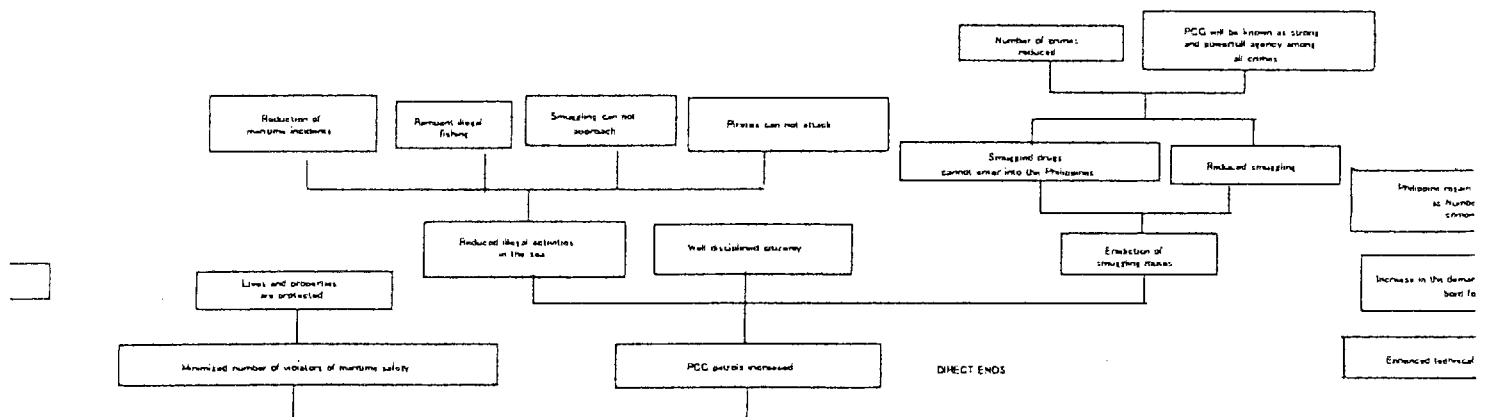
F. Multilateral Cooperation Approach CORE OBJ



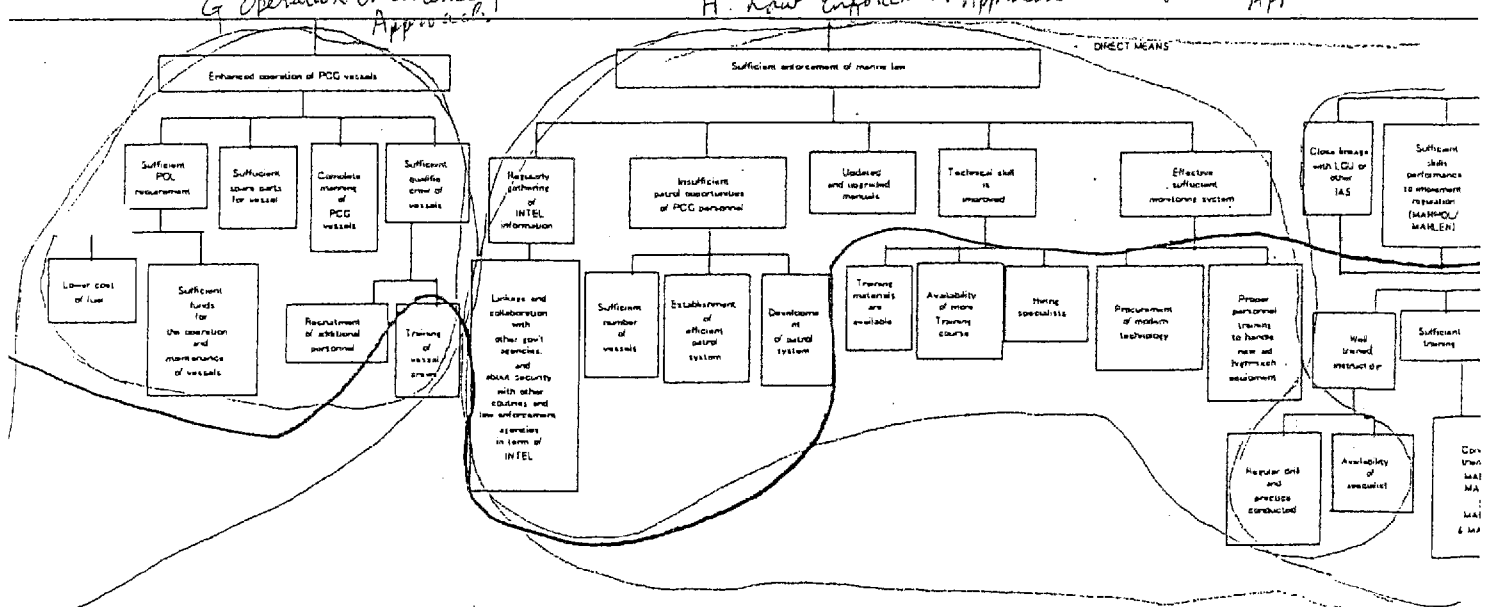
D. (B+F) Competence Enhancement Approach

(G+I) E. Facility & Equipment Approach

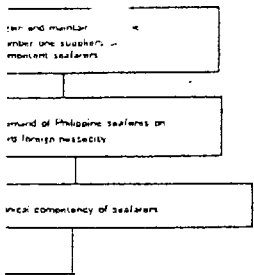
Selected Strategy (Approach) → L. PCG Performance Capability Enhancement Approach (B + F + (G) + (H) + (I))



OBJECTIVE: Performance capability of PCC Mission is improved. CORE OBJECTIVE: I. (H+J) Laws & Regulations Approach



L. PCC Performance Capability Enhancement Approach

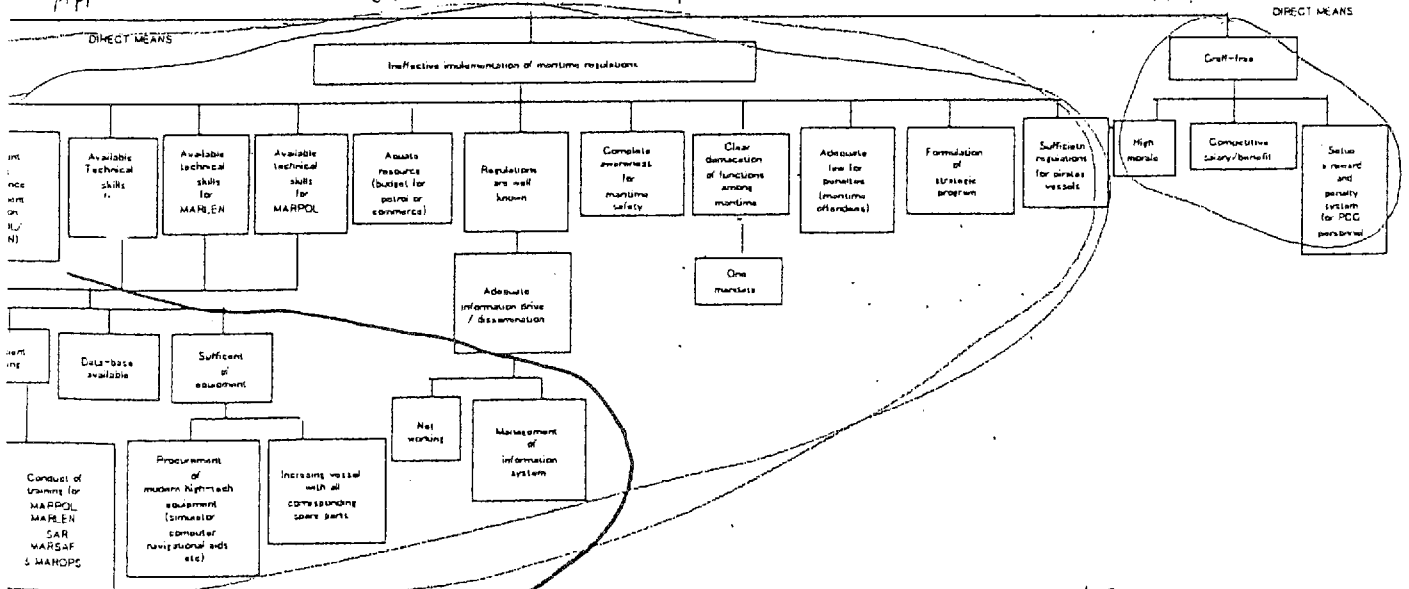


DIRECT ENDS

*I (H+J)
Laws & Regulations
Approach*

*J. Maritime Regulation
Approach*

K. Crew-free Approach



*L (B+F+(G)+(H)+(J))
PCF Performance Capability Enhancement
Approach*

ANNEX 7.6 LIST OF EQUIPMENT

- 1) Equipment for SAR
 - Underwater SAR equipment
 - Fire fighting equipment
 - First aids
 - Measuring instruments
 - Others

- 2) Equipment for ATON
 - Light House model with functional kits
 - Measuring instruments
 - Dummy model for artificial respiration practice
 - Others

- 3) Equipment for MARPOL & OSC
 - Rubber boat with engine
 - Oil spill combating equipment
 - Oil testing analyzer
 - Others

- 4) Equipment for MARLEN
 - Drug testing equipment
 - Fiber scope
 - Identification equipment
 - Others

- 5) Equipment for common use
 - Audio-visual training equipment
 - Computer with LAN system
 - Printer
 - Overhead projector
 - Video camera
 - Camera
 - Vehicle
 - Others

ANNEX 7.7 The Basic Concept of 5 Evaluation Criteria

The 5 Evaluation Criteria, which Development Assistance Committee (DAC) of OECD encourages to apply for evaluation, has been introduced into JICA Project Cycle Management method (PCM) for project design & planning, preparatory examination & appraisal and midterm evaluation, final evaluation and post project evaluation. Concepts of each criterion for examination & appraisal and evaluation are as follows:

Efficiency : Measure the efficiency with which Outputs achieves(ed) through Inputs, in terms of both quantity and quality, considering the appropriateness, timing, cost performance, and benefit of Inputs.

Effectiveness : Identify the achievement level of Project purpose, considering on the extent to what Outputs contributes(ed) to its achievement.

Impact : Examine what the project affects(ed) to the society of a recipient country, considering both positive and negative, and direct and indirect effects.

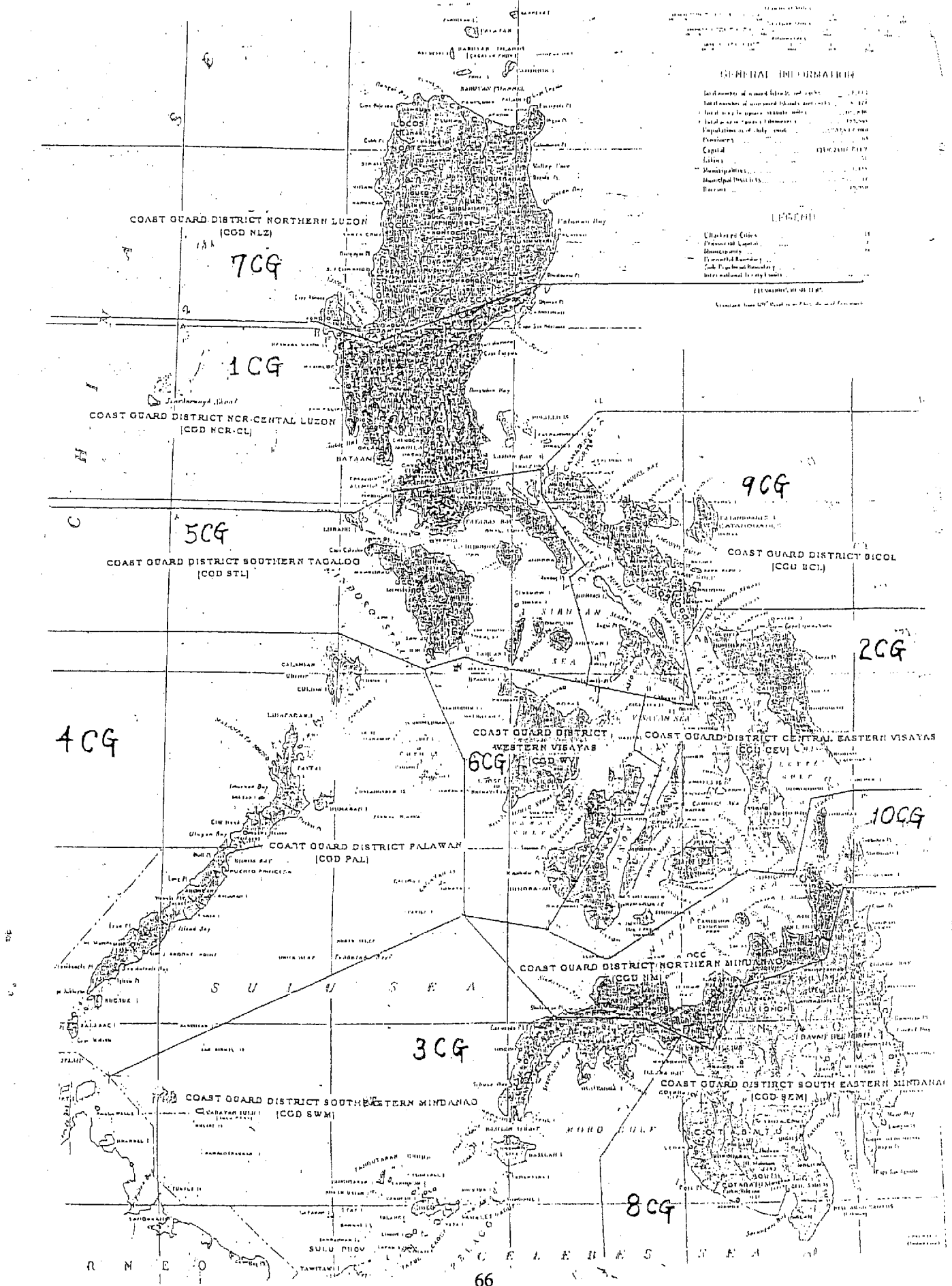
Relevance : Examine direction of the project, whether Project purpose and Overall goal are(were) consistent with the development policy of a recipient country and with BHN of the people.

Sustainability : Examine whether the benefits of the project will be (is) sustained after the donor's assistance is completed, considering on institutional & management capability, economic & financial aspect, socio-cultural aspect, environment aspect, technological level.

On the design & planning stage, project alternatives analysis and project selection are examined under the above 5 criteria. They will be criteria for preparatory appraisal of the PDM of a potential project, midterm evaluation and final evaluation of an implementing project, and post-project evaluation of a completed project. The 5 evaluation criteria are summarized into the following table showing the relation with components of the PDM.

5 Criteria Components	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall goal			What kind of impacts are observed?	Whether Project purpose and Overall goal have consistency with recipient country's needs?	Whether recipient country could sustain benefits from the Project by themselves after completion of donor's assistance?
Project purpose		How Outputs contributed to the Project?			
Outputs	How the Inputs are converted into the Outputs?				
Inputs					

Area of Responsibility (AOR) of Coast Guard Districts

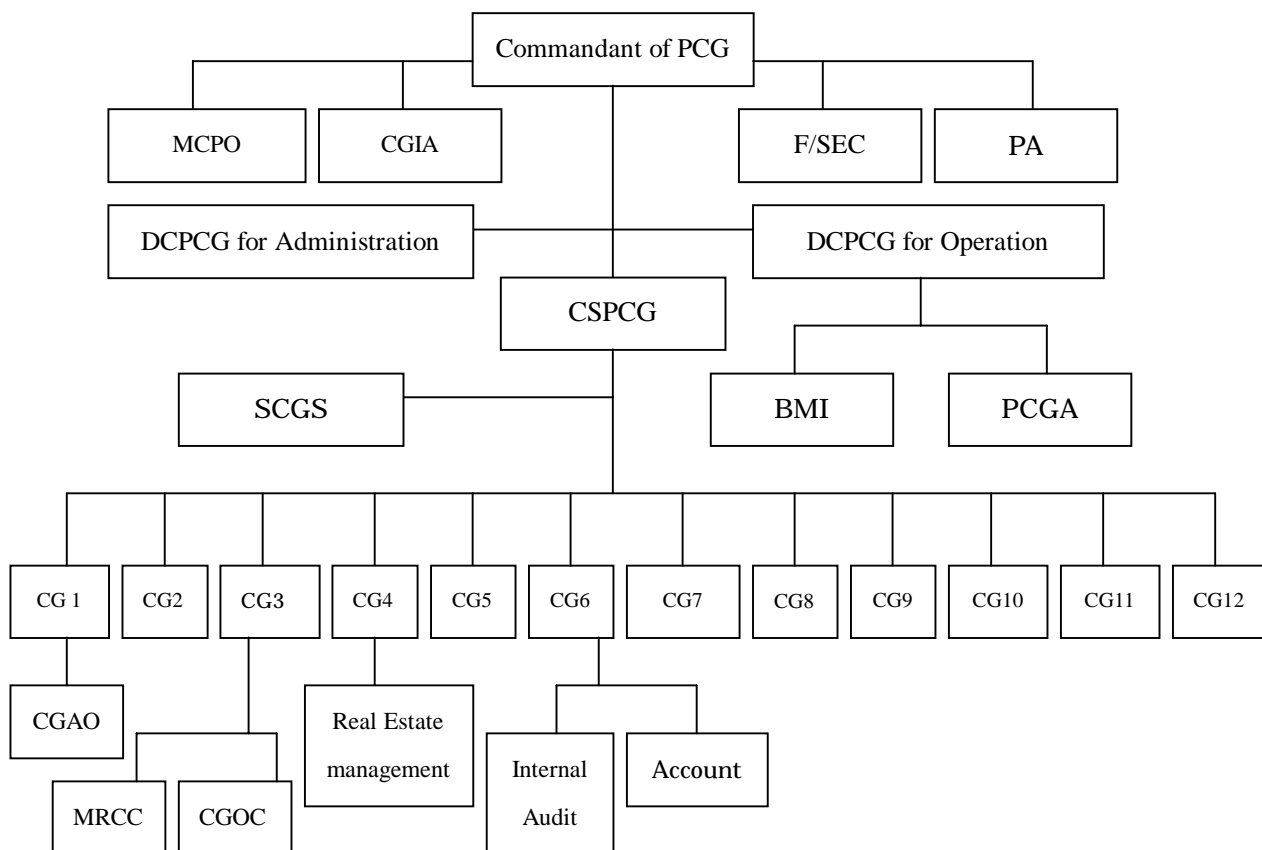


ANNEX "C"

COAST GUARD DETACHMENTS



Former PCG Headquarters and Staff Organization



[Acronym]

BMI: Board of Maritime Inquiry, CGIA: Coast Guard Internal Affairs, CSPCG: Chief of Staff, PCG,

CGAO: Coast Guard Office, CGOC: Coast Guard Operation Center,

Deputy Commandant of PCG, F/SEC: Flag Secretary,

MCPO: Master Chief Petty Officer, MRCC: Maritime response coordinating center,

PA: Public Affairs, DCPCG, PCGA: PCG Auxiliaries Affairs, SCGS: Secretary of Coast Guard Staff

CG1: Staff for personnel, CG2: Staff for intelligence, CG3: Staff for operation,

CG4: Staff for logistics, CG5: Staff for plans, program, CG6: Staff for controllership,

CG7: Staff for training, CG8: Staff for maritime safety affairs, CG9: Staff for environmental protection,

CG10: Staff for aids to navigation, CG11: Staff for communication/ electronic,

CG12: Staff for ship engineering & international affairs,

Source: PCG, March 2002

Acronym of Proposed PCG Organizational Set-up

ADMIN	ADMINISTRATION
ANC	AIDS TO NAVIGATION CENTER
CGAA	COAST GUARD AUXILIARY AFFAIRS
CGAC	COAST GUARD AVIATION GROUP
CGDC	COAST GUARD DISTRICT COMMAND
CGF	COAST GUARD FLEET
CGIIF	COAST GUARD INVESTIGATION & INTELLIGENCE COURSE
CGOF	COAST GUARD OPERATING FORCE
ED/TRNG COM	EDUCATION & TRAINING COMMAND (CGETC)
EPSC	ENLISTED PERSONNEL SCHOOL
GMDSS	GLOBAL MARITIME DISTRESS SIGNALING SYSTEM
HEA	HEAD EXECUTIVE ASSISTANT
INT AFR COM	INTERNATIONAL AFFAIRS COMMAND
MAN	MARITIME AIDS TO NAVIGATION
MEPC	MARINE ENVIRONMENTAL PROTECTION COMMAND
MSEC	MARITIME SECURITY CMMAND
MSSC	MARITIME SEA SAFETY COMMAND
NOCOP	NATIONAL OPERATION CENTER FOR OIL POLLUTION
OSC	OFFICERS SCHOOL
PERS CGAO	COAST GUARD ADJUTANT OFFICE
PM	PROVOST MARSHAL
PROC	PROCUREMENT
PSCC	PORT STATE CONTROL CENTER
PWO	PUBLIC WORKS OFFICE
RECASTA	RECEIVING STATION
REDDPAG	RESEARCH DOCTRINE DEVELOPPMENT & PERSONNEL ADVANCEMENT GROUP
REMO	REAL STATE MANAGEMENT OFFICE
SSO	SPECIAL SERVICE STATION
STNS	STATIONS
TECH SVC	TECHNICAL SERVICE
TECH SVR COM	TECHNICAL SERVICE COMMAND
TSG	TRAINING SERVICE GROUP
WELCOM	WEAPONS ELECTRONIC COMMAND

ANNEX 7.11 PLAN OF PCG TRAINING IN CGETC FROM 2002 TO 2007

Courses directly aimed for Technology transfer

Source: PCG, March 2002

COURSES/ACTIVITIES		DURA (MTH)	2002/03	2003/04	2004/05	2005/06	2006/07
BASIC COURSE							
OFFICERS	CGOC "A" Class 03-2002	8	30	60	90	90	25
OFFICERS	CGOC "B" Class 01-2002	6	30				
ENLISTED	CGMC Class 05-2002	6	160	160	160	160	160
SPECIALIZATION COURSE							
OFFICERS	Maritime Safety Inspector Course	2		30	30	30	30
OFFICERS	Maritime Investigation Officer Course	2		30	30	30	30
OFFICERS	Aids to Navigation Officer Course	2		30	30	30	30
OFFICERS	Marine Environmental Protection Officer Course	2		30	30	30	30
OFFICERS	Maritime Search and Rescue Coordination Officer Course	2		30	30	30	30
OFFICERS	Maritime Law Enforcement Officer Course	2		30	30	30	30
OFFICERS	Logistic Officer Course	2		30	30	30	30
OFFICERS	Comptroller Officer Course	2		30	30	30	30
OFFICERS	Communication and Electronic Officer Course	2		30	30	30	30
OFFICERS	Finance Management Officer Course	2		30	30	30	30
ENLISTED	Marine Safety Petty Officer Course	5		40	60	60	60
ENLISTED	Marine Safety Investigation Petty Officer Course	5		40	60	60	60
ENLISTED	Maritime Search and Rescue Petty Officer Course	5		40	60	60	60
ENLISTED	Marine Environmental Protection Petty Officer Course	5		40	60	60	60
ENLISTED	Maritime Aids to Navigation Petty Officer Course	5		40	60	60	60
ENLISTED	Navigation/Comms Class 01	4	40				
ENLISTED	Seamanship Class 01	4	40				
ENLISTED	Engineering Class 01	4	40				
ENLISTED	Machinery Technician Course	4		40	80	80	80
ENLISTED	Boatswain's Mate Course	4		40	80	80	80
ENLISTED	Quarter Master Course	4		40	80	80	80
ENLISTED	Damage Controlman Course	4		40	80	80	80
ENLISTED	Electrician's Mate Course	4		40	80	80	80
ENLISTED	Electronic Technician Mate Course	4		40	80	80	80
ENLISTED	Radarman Course	4		40	80	80	80
ENLISTED	Radioman Course	4		40	80	80	80
ENLISTED	Aviation Technician Course	4		40	80	80	80
ENLISTED	Gunner's Mate Course	4		40	80	80	80
ENLISTED	Commissary Steward Course	4		40	80	80	80
ENLISTED	Storekeeper Course	4		40	80	80	80
ENLISTED	Yeoman Course	4		40	80	80	80
ENLISTED	Health Services Technician Course	4		40	80	80	80
ENLISTED	Musician Course	4		40	80	80	80
ENLISTED	ATON Specialization	6	40				
ENLISTED	MARSAR Specialization	6	40				
ENLISTED	VS Specialization	6	40				
ENLISTED	MAREP Specialization	6	40				
ADVANCE COURSE							
OFFICERS	CGCSC CL 03-02	6	25	25	25	25	25
ENLISTED	ALMC	6	40	40	40	40	40
IN-HOUSE COURSE/PECULIAR COURSE							
OFFICERS	Ship Watch Standing Package Crse	1	25	30	30	30	30
OFFICERS	Deck Watch and Planning Officer Course	1	25	30	30	30	30
OFFICERS	Engineering Watch and Planning Officer Course	1	25	30	30	30	30
OFFICERS	CO Package Course	1	10	30	30	30	30
OFFICERS	EXO Package Course	1	10	30	30	30	30
ENLISTED	Boat Captain Course	1	20	30	30	30	30
ENLISTED	Boat Engr Course	1	20	30	30	30	30
BOTH	Maritime Investigation Course	1	20	30	30	30	30
BOTH	Basic Scuba Divers Course	1	25	30	30	30	30

ANNEX 7.11 PLAN OF PCG TRAINING IN CGETC FROM 2002 TO 2007

Courses directly aimed for Technology transfer		Source: PCG, March 2002					
BOTH	Anti-Seajacking Course(CQB)	1	25	30	30	30	30
BOTH	EOD Course	1	25	30	30	30	30
BOTH	Instructor Course	1	20	30	30	30	30
BOTH	Drill Instructor Course	1	20	30	30	30	30
BOTH	LH Opns and Maint Package Crse	1	20	30	30	30	30
OUTSIDE TRAINING AND SEMINARS							
OFFICERS	PNCGSC	8	5	12	12	12	12
BOTH	NIOC	4	4	6	6	6	6
OFFICERS	Basic Pilot Training	8	2	6	6	6	6
OFFICERS	Justice System Seminar	1	6	6	6	6	6
OFFICERS	Fund Accountable Officer Course	5	6	6	6	6	6
OFFICERS	Comptroller Officer Course	5	6	6	6	6	6
OFFICERS	Instrument Flight Rules Trng	1	2	6	6	6	6
ENLISTED	A/C Maintenance Course	1	2	6	6	6	6
BOTH	SARDAMEA (Basic SAR crse w/ Airborne)	1	2	6	6	6	6
OFFICERS	BN1 Equipment Qualification	1	2	6	6	6	6
OFFICERS	BO 105 Equipment Qualificatrn	1	2	6	6	6	6
OFFICERS	BN1Co-pilot Qualification	1	2	6	6	6	6
OFFICERS	Bo 105 Co-pilot Qualification	1	2	6	6	6	6
OFFICERS	BN1 Re currency Training	1	2	6	6	6	6
OFFICERS	BO 105 Re currency Training	1	2	6	6	6	6
BOTH	Intro. To Visual Basic Programming	1	2	6	6	6	6
BOTH	Web page design using HTML	1	2	6	6	6	6
BOTH	Networking Essentials(LAN)	1	2	6	6	6	6
BOTH	Internetworking w/ Windows NT Networks	1	2	6	6	6	6
BOTH	Telecom Cable Splicing (Metallic)	1	2	6	6	6	6
BOTH	Basic Digital Technology	1	2	6	6	6	6
BOTH	Digital Tel. Switching Concept & Application	1	2	6	6	6	6
BOTH	Digital Transmission Technicians	1	2	6	6	6	6
BOTH	Integrated Services Digital Network (ISDN)	1	2	6	6	6	6
BOTH	Basic Telecommunications Technology (BTT)	1	2	6	6	6	6
BOTH	Human Resource Management	1	3	6	6	6	6
OFFICERS	Government Internal Auditors	1	3	6	6	6	6
BOTH	Gov. Acctg Courses	1	1	6	6	6	6
BOTH	Personality Dev.	1	1	6	6	6	6
BOTH	Waste Management	1	1	6	6	6	6
BOTH	Seminars/Training	1	100	200	300	400	500
FOREIGN TRAINING							
BOTH	GTC		4	4	8	8	8
OFFICERS	SIDA		1	4	4	4	4
OFFICERS	CIDA		1	4	4	4	4
OFFICERS	WMU		3	4	4	4	4
BOTH	FOREIGN SPONSORED TRAINING		10	20	30	40	50
BOTH	PTTC		4	4	4	4	4
TOTAL			1,054	2,231	3,075	3,185	3,230