

The Republic of the Philippines

FY2015 Ex-Post Evaluation of Technical Cooperation Project

“the Project on Philippine Coast Guard Human Resource Development (Phase I)”
and

“the Philippine Coast Guard Education and Human Resource Management System
Development Project (Phase II)”

External Evaluator : Koichiro Ishimori, Value Frontier Co., Ltd

0. Summary

The program consisting of Phase I and II aimed to develop personnel with knowledge and skills required to perform the functions of the Philippine Coast Guard (PCG). For its aim, Phase I developed education and training courses and Phase II developed education and training system at the Coast Guard Education and Training Command (CGETC), where PCG provides its personnel with education and training. The implementation of the program was in line with the development policies and needs of the Philippines as well as the development policies of Japan, and thus its relevance is high. The program achieved the project purposes of both the phases: Through Phase I, PCG personnel with the knowledge and skills required in performing their functions were developed; and through Phase II, PCG’s education and human resource management system was developed. It also had great impacts on the four target areas of the program, i.e., search and rescue (SAR), aids to navigation (ATON), marine pollution/oil spill combating (MARPOL /OSC), and maritime law enforcement (MARLEN), in conjunction with numerous contributions by other Japanese cooperation. Thus, its effectiveness and impacts are high. The cost and period of the actual program were almost the same as planned, and thus, its efficiency is high. However, the sustainability of the program effects is fair because of the minor problems in the organizational and technical aspects of PCG, which are required to sustain the program effects.

In light of all the above, the program is evaluated to be highly satisfactory.

1. Project Description



Project Location



Search and rescue training

1.1 Background

A number of marine accidents resulting in the loss of lives was occurring every year in the sea near the Philippines consisting of over 7,000 islands. However, PCG did not have an adequate search and rescue system. There were also many accidents and incidents such as the pollution of the marine environment by oil spills from tankers, piracy activities, and illegal maritime trafficking of drugs and firearms. Therefore, ensuring maritime safety and security was imperative to the Philippines.

1.2 Project Outline¹

Overall Goal		(I) PCG improves capacities to perform its functions. (II) PCG improves capacities as a law enforcement organization.
Project Purpose		(I) PCG develops its personnel's knowledge and skills required to perform its functions. (II) PCG develops an education and human resource management system.
(I) Outputs	Output 1	PCG strengthens its education and training management system.
	Output 2	PCG develops training courses and holds seminars in the four areas ² with participants from other concerned governmental and private organizations.
	Output 3	PCG strengthens its basic training courses including OJT/unit training.
(II) Outputs	Output 1	PCG establishes a concurrent instructor system.
	Output 2	PCG develops training programs on MARLEN.
	Output 3	PCG develops and strengthens training programs on ship operations.
Total cost (Japanese Side)		(I) 801 million yen, (II) 314 million yen
Period of Cooperation		(I) July, 2002 - June 2007, (II) January 2008 - December 2012
Implementing Agency		Philippine Coast Guard (PCG)
Supporting Agency / Entity in Japan		Japan Coast Guard (JCG)
Related Projects		<p>【Technical Cooperation】</p> <ul style="list-style-type: none"> • Dispatching experts on coast guard administration (2003-2006, 2006-2009, 2009-2012) • Enhancement of practical capability for maritime law enforcement project (2013-2015) • Enhancement of practical capability for maritime law enforcement project II (2016-) <p>【Grant Aid Assistance】</p> <ul style="list-style-type: none"> • The Project for enhancement of communications system for maritime safety and Security (2007-2009) • The Project for enhancement of coastal communications systems (2014-) <p>【ODA Loan Assistance】</p> <ul style="list-style-type: none"> • Maritime safety capability improvement project for PCG (2013-)

1.3 Outline of the Terminal Evaluation

1.3.1 Achievement Status of Project Purpose at the Time of the Terminal Evaluation

【Phase I】

¹ English expressions in some parts of the project outline have been modified from the original ones.

² The four areas are search and rescue (SAR), aids to navigation (ATON), marine pollution/oil spill combating (MARPOL /OSC), and maritime law enforcement (MARLEN).

The terminal evaluation of the Phase I project expected that the project would achieve its project purpose because it provided training on the knowledge and skills required to perform functions of PCG for an equivalent or even greater number of personnel than planned.

【Phase II】

The terminal evaluation of the Phase II project expected that the project would achieve its project purpose because it appointed an equivalent number of concurrent instructors as planned and developed training on MARLEN and ship operations.

1.3.2 Achievement Status of Overall Goal at the Time of the Terminal Evaluation

【Phase I】

The terminal evaluation of the Phase I project expected that the project would achieve its overall goal because the number of missions in SAR, ATON, MARPOL/OSC, and MARLEN increased, meaning that PCG was able to take appropriate actions.

【Phase II】

The terminal evaluation of the Phase II project expected that the project would achieve its overall goal because the number of missions in MARLEN and patrols by patrol boats increased.

1.3.3 Recommendations at the Time of the Terminal Evaluation

Recommendations at the time of the terminal evaluations of the Phase I project and the Phase II project and follow-up situations of the recommendations are as follows.

Table 1: Recommendations and follow-up situations of the recommendations
at the time of the terminal evaluation

Recommendations		Follow-up situations
【Phase I (2006)】		
1	It is desired that the curriculum and syllabus of SAR, ATON, MARPOL/OSC, and MARLEN as well as the evaluation/feedback system are improved.	Curriculum and syllabus in respective areas as well as the evaluation/feedback system were improved by the end of the project.
2	It is desired that a permanent faculty system is launched.	A permanent faculty system was approved by the commandant of PCG and was launched by the end of the project. However, it ended in six months because it did not fit in with the existing career system that required rotations on a regular basis. Therefore, the Phase II project established a concurrent instructor system that fit in with the existing career system.
【Phase II (2012)】		
1	Regarding Output 3 of developing and strengthening training programs on ship operations, it is desired that a course for trainers, apart from the ship operation course, is developed.	No course for trainers, apart from the ship operation course, has been developed. However, the ongoing Enhancement of Practical Capability for Maritime Law Enforcement Project II is planning to develop one.
2	Regarding Output 3, it is desired that a certification program for trainers, apart from the certification program for coast guard officers/non-officers, is developed.	A certification program for trainers was developed by the end of the project.

Source: JICA

2. Outline of the Evaluation Study

2.1 External Evaluator

Koichiro Ishimori, Value Frontier Col., Ltd

2.2 Duration of Evaluation Study

The ex-post evaluation was conducted according to the following schedule.

Duration of the Study: September 2015 - October 2016

Duration of the Field Study: January 10, 2016 - January 26, 2016, and April 10, 2016 - April 16, 2016

3 Results of the Evaluation (Overall Rating: A³)

3.1 Relevance (Rating: ③⁴)

3.1.1 Relevance to the Development Plan of the Republic of the Philippines

【Phase I】

“The Mid-Term Philippine Development Plan (1994-2004)” at the time of the project planning highlighted the importance of “ensuring maritime safety and security” in one of the

³ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁴ ③: High, ② Fair, ① Low

six priorities, “development of infrastructures”. Similarly, “the PCG 15 Year Development Plan (2000-1015)” highlighted the importance of “building the capabilities of PCG personnel through training and human resource management system” in one of the seven priorities.

“The Mid-Term Philippine Development Plan (2004-2010)” at the time of the project completion continuously highlighted the importance of “securing maritime safety and security” in one of the 24 priorities, “infrastructures”. “The PCG 15 Year Development Plan (2000-1015)” was still valid.

The Phase I project that aimed to ensure maritime safety and security in the sea near the Philippines through training of PCG personnel was thus in line with the development policies of the Philippines both at the time of the project planning and completion.

【Phase II】

Similar to the Phase I project, the Phase II project was in line with the priorities of “the Mid-Term Philippine Development Plan (2004-2010)” and “the PCG 15 Year Development Plan (2000-1015)” at the time of the project planning.

“The Mid-Term Philippine Development Plan (2011-2016)” at the time of the project completion continuously highlighted the importance of “ensuring maritime safety and security” in one of the nine priorities, “acceleration of infrastructure development”. “The PCG 15 Year Development Plan (2000-1015)” was also still valid.

The Phase II project that aimed to ensure maritime safety and security in the sea near the Philippines through training of PCG personnel and development of human resource management system was thus in line with the development policies of the Philippines both at the time of the project planning and completion.

3.1.2 Relevance to the Development Needs of the Republic of the Philippines

【Phase I】

When the project was planned, PCG’s management had been transferred from the Philippine Navy to Department of Transportation and Communications and restructured as a civilian organization. However, because all PCG personnel were from the Philippine Navy, they did not possess adequate knowledge and skills required to ensure maritime safety and security.

When the project was completed, PCG still had its mission to ensure maritime safety and security. For this reason, PCG continued to be responsible for responding to maritime incidents such as piracy activities in the South East Asia, although such activities had exhibited a decreasing trend since 2004⁵.

⁵ While there were 158 cases in 2004, there were 70 cases in 2007 (“Maritime security” in the HP of the Ministry of Foreign Affairs of Japan)

The Phase I project that aimed to ensure maritime safety and security in the sea near the Philippines through training of PCG personnel was thus in line with the development needs of the Philippines both at the time of the project planning and completion.

【Phase II】

PCG developed an education and training system and strengthened the training courses in the four areas through the Phase I project. When the Phase II project was planned, however, it was necessary for PCG to develop a more efficient human resource management system in order to further improve its performance. However, PCG did not have adequate knowledge and skills required to develop it, and thus had difficulties in developing it by itself.

When the Phase II project completed, PCG still had its mission to ensure maritime safety and security. Due to this, PCG continued to be responsible for responding to maritime incidents such as piracy activities in the South East Asia that had exhibited an increasing trend since 2010⁶.

The Phase II project that aimed to secure maritime safety and security in the sea near the Philippines through training of PCG personnel and development of human resource management system was thus in line with the development needs of the Philippines, both at the time of the project planning and completion.

3.1.3 Relevance to Japan's ODA Policy

【Phase I and II】

“Aid policies on the Philippines (2000 and 2007)” of the Ministry of Foreign Affairs of Japan at the time of the projects’ planning recognized that the Philippines was geopolitically important because it was located in a strategic point of the sea lane in the South China Sea. They also highlighted the importance of building the capacities of administrative organizations in one of the four priorities, development of human resources and system. Similarly, the data books (2000 and 2007) of the Ministry of Foreign Affairs of Japan recognized that the Philippines was geopolitically important because it was located in the sea lane connecting Japan to the South East Asia, the Middle East, and the Europe.

The Phase I and II projects that aimed to secure maritime safety and security through the training of PCG personnel and development of human resource management system were thus in line with the development policies of Japan at the time of the projects planning.

In light of the above, the Phase I and II projects were highly relevant to the Philippines’ development plan and development needs, as well as Japan’s ODA policy. Therefore, its relevance is high.

⁶ While there were 70 cases in 2010, there were 104 cases in 2012 (“Maritime security” in the HP of the Ministry of Foreign Affairs of Japan)

3.2 Effectiveness and Impact⁷ (Rating:③)

3.2.1 Effectiveness

3.2.1.1 Project Output⁸

【Phase I】

The Phase I project developed education and training courses in the four areas, SAR, ATON, MARPOL/OSC, and MARLEN, and also developed basic education courses to improve the skills of ship operations based on the mid-term evaluation of the project. As a result, it achieved the following project purpose to the same or a greater extent than planned. Therefore, the Phase I project is considered to have achieved its project purpose of PCG developing its personnel's knowledge and skills required to perform its functions.

Table 2 Achievement of the project purpose of the Phase I Project

Project purpose	Indicators	Actual achievement
Project purpose of the Phase I project	① A total of 2,050 personnel are trained such that they can take appropriate actions in the four areas by 2007.	① A total of 2,325 personnel were trained such that they can take appropriate actions in the four areas by 2007.
	② A total of 450 personnel including the concerned public and private organizations are invited to and participated in training in the four areas by 2007.	② A total of 515 personnel including the concerned public and private organizations were invited to and participated in training in the four areas by 2007.
	③ A certain number of personnel who have knowledge and skills as instructors are trained in the four areas by 2007.	③ A total of 74 personnel who have knowledge and skills as instructors were trained in the four areas by 2007.

Source: JICA documents

【Phase II】

Based on the achievement of the project purpose of the Phase I project, the Phase II project further strengthened education and training courses in MARLEN that needed crackdown on crafted crimes in recent years and courses in ship operations. As a result, it achieved the following project purpose to the same or a greater extent than planned. Therefore, the Phase II project is considered to have achieved its project purpose of PCG developing an education and human resource management system.

⁷ Sub-rating for Effectiveness is to be put with consideration of Impact.

⁸ Achievements of respective outputs that bring about achievement of the project purpose are described in the appendix.

Table 3 Achievement of the project purpose of the Phase II Project

Project purpose	Indicators	Actual achievement
Project purpose of the Phase II project	①28 PCG personnel and private instructors are appointed as concurrent instructors by 2012.	①27 PCG personnel received training not only at CGETC but also in Japan and were appointed as concurrent instructors by 2012. Due to legal problems with employment, no private instructor was appointed.
	②300 new and mid-career officers and non-officers receive training in MARLEN courses by 2012.	②1,559 new and mid-career officers and non-officers received training in MARLEN courses by 2012.
	③153 PCG personnel become eligible for ship operations by 2012.	③483 PCG personnel passed the final exam of the training in ship operations after receiving the training and became eligible for ship operations by 2012.
	④6 instructors ⁹ receive courses in ship operations by 2012.	④24 candidates for instructors passed the final exam of the training in ship operations after receiving the training by 2012. They later became instructors after 3 years of shipboard experience.

Source: JICA documents

In light of the above, it is considered that the Phase I and II projects achieved their project purposes.

3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

As mentioned above, the Phase I and II projects achieved their project purposes. To effectively achieve the overall goals of the projects in improving PCG's capacities to perform its functions, however, it is necessary not only to sustain the achievement of the project purposes but also to strengthen other PCG activities through personnel's capacity building and infrastructure development. . Therefore, firstly, the degree of achievement of the overall goals that can be achieved if the project purposes can be sustained is described, and secondly, the contributions that other forms of Japanese cooperation, namely technical cooperation, grant aid assistance, and ODA loan assistance, can make to strengthening other PCG activities through personnel's capacity building and infrastructure development.

【Phase I】

The Phase I project has achieved indicator ① and ② to measure the extent of achievement of the overall goal, but has not achieved ③. Therefore, it is considered to have partially achieved the overall goal of PCG improving capacities to perform its functions.

⁹ It was written in the indicator that instructors would receive trainings. However, candidates for instructors should receive training. Therefore, it is understood that "instructors" in the indicator refers to candidates for instructors.

Table 4 Achievement of the overall goal of the Phase I project

Overall goal	Indicator ¹⁰	Actual achievement
Overall goal of the Phase I project	①The number of PCG missions in SAR from 2007 to 2011 improves, in comparison with the number of missions from 2002 to 2006.	①While the number of PCG missions in SAR was 2,149 from 2002 to 2006, it was 3,233 from 2007 to 2011. Since it increased, the indicator is considered to be achieved. (The annual average number of PCG missions in SAR was 430 from 2002 to 2005, 583 from 2006 to 2010, and 694 from 2011 to 2015.)
	②The number of PCG missions in MARPOL/OSC from 2007 to 2011 improves, in comparison with the number of missions from 2002 to 2006.	②While the number of PCG missions in MARPOL/OSC was 39,705 from 2002 to 2006, it was 48,762 from 2007 to 2011. Since it increased, the indicator is considered to be achieved. (The annual average number of PCG missions in MARPOL/OSC was 7,470 from 2002 to 2005, 9,980 from 2006 to 2010, and 10,075 from 2011 to 2015.)
	③The number of PCG missions in MARLEN ¹¹ from 2007 to 2011 improves, in comparison with the number of missions from 2002 to 2006.	③While the number of PCG missions in MARLEN was 804 from 2002 to 2006, it was 678 from 2007 to 2011. The reasons for the decrease were that the Philippine Drug Enforcement Agency, in addition to the Philippine National Police, has become active since 2006 and that crafted crimes of recent have made it difficult for PCG to crack down on unidentified objects. Because the number of PCG missions in MARLEN from 2007 to 2011 decreased in comparison with the number of missions from 2002 to 2006, it is considered that the indicator was not achieved.

Source: JICA documents

【Phase II】

The Phase II project has achieved all the indicators to the same or a greater extent than planned. Therefore, the overall goal of PCG improving capacities as a law enforcement agency is considered to have been achieved.

Table 5 Achievement of the overall goal of the Phase II project

Overall goal	Indicator	Actual achievement
Overall goal of the Phase II project	①The number of missions in MARLEN increases.	①While the number of missions in MARLEN before the Phase II project (in 2007) was 98, the annual average number of missions from 2011 to 2015 was 119. Since it increased, the indicator is considered to be achieved.
	②The number of patrol missions by patrol boats increases.	②While the number of patrol missions by patrol boats before the Phase II project (in 2007) was 2,097, the annual average number of patrol missions from 2011 to 2015 was 4,328. Since it increased, the indicator is considered to be achieved.

Source: JICA documents

The contributions that other forms of Japanese cooperation, namely technical cooperation, grant aid assistance, and yen loan assistance, can make to strengthening other PCG activities through personnel's capacity building and infrastructure development are described below.

¹⁰ PDM1 used the rate of responses (the number of missions/the number of incidents) in each of the indicators ①-③. However, the mid-term evaluation changed it into the number of missions as shown in PDM2.

¹¹ Missions in MARLEN include reactions to piracy activities as well as illegal maritime trafficking of drugs and fire arms.

【Technical cooperation】

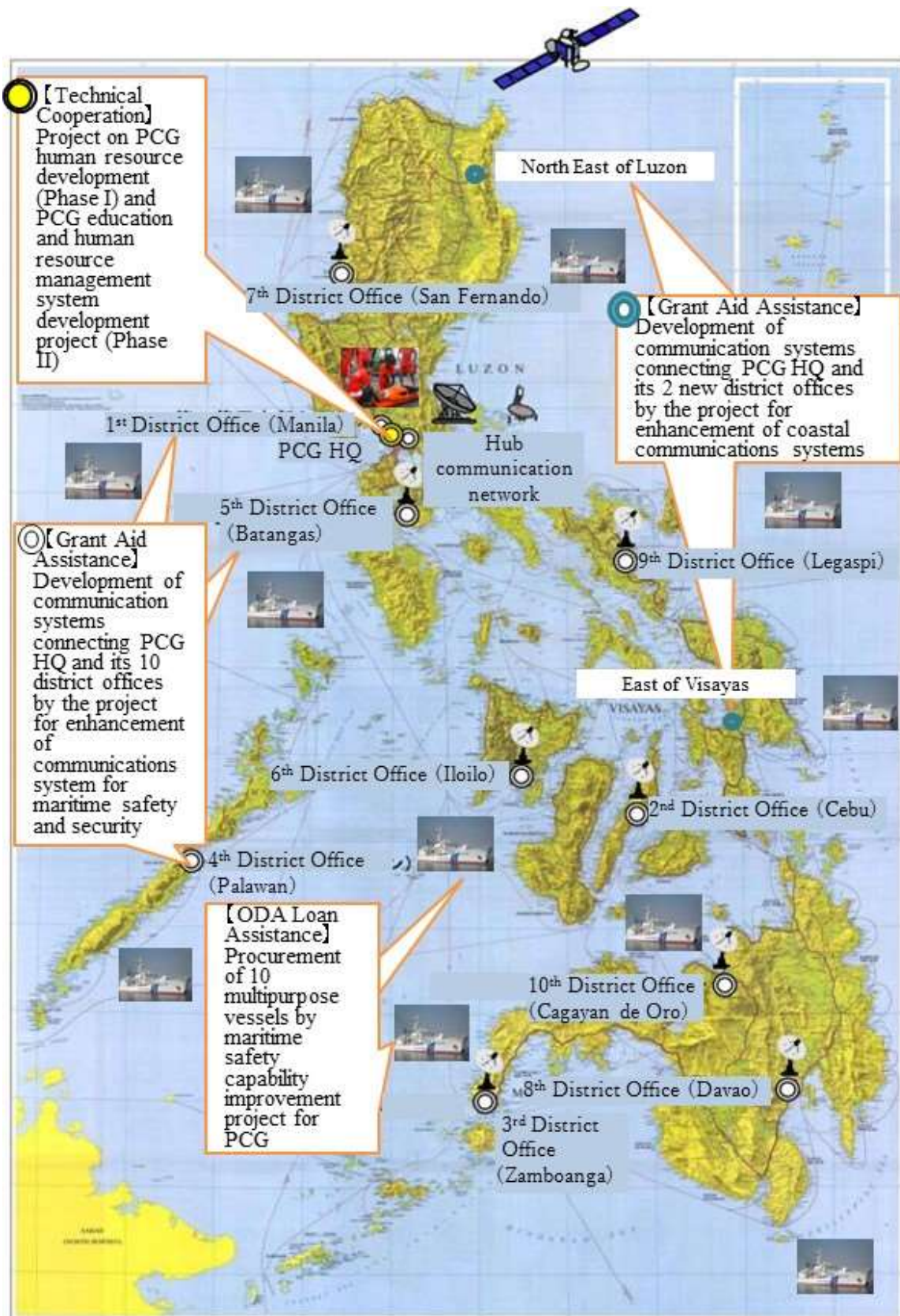
Group training courses (2007-) have annually invited five mid-career or executive officers on the average to Japan and provided them with numerous trainings in the four areas of SAR, ATON, MARPOL/OSC, and MARLEN. For example, “Maritime search and rescue, marine disaster prevention and marine environment protection course for the officials for maritime safety operational level (2011-)” has been providing PCG’s field commanders with 1) lectures on SAR, marine disaster prevention, and marine environment protection; 2) field training using facilities, ships, and aircrafts of Japan Coast Guard; 3) training on marine disaster prevention; and 4) training on marine environment protection. It has thus been contributing to improving PCG’s capabilities on the ground to respond to incidents in the areas of SAR and MARPOL/OSC. Therefore, group training courses (2007-) are considered to be supporting the functions of PCG and are contributing to the achievement of the overall goals of the Phase I and II projects. Similarly, dispatching experts on coast guard administration (2003-2006), (2006-2009), and (2009-2012) as well as “Enhancement of practical capability for maritime law enforcement project” (2013-2015) and “Enhancement of practical capability for maritime law enforcement project II” (2016-) have been providing numerous policy advice and field trainings primarily in the areas of ATON and MARLEN. For example, “Enhancement of practical capability for maritime law enforcement project” (2013-2015) developed the maritime training system for maritime law enforcement, and “Enhancement of practical capability for maritime law enforcement project II” (2016-) has been providing field trainings including instructions on arresting techniques. They have thus been contributing to improving PCG’s capabilities on the ground to respond to incidents in the area of MARLEN. Therefore, they are considered to be supporting the functions of PCG and contributing to the achievement of the overall goals of the Phase I and II projects.

【Grant aid assistance】

“The project for enhancement of communications system for maritime safety and security” (2007-2009) developed a communications system connecting PCG HQ and its 10 district offices. “The project for enhancement of coastal communications systems” (2014-) has been developing communication systems connecting PCG HQ and its newly established 2 district offices in addition to the 10 district offices. With these projects, PCG is and will be able to accurately send and receive confidential information in greater areas that is necessary for prompt and well-coordinated SAR activities. In conjunction with contributions to the capacity development of PCG through Phase I and II projects, particularly in the area of SAR, these grant aid assistances have been bringing about synergies for supporting PCG functions. Therefore, grant aid assistance is considered to be contributing to the achievement of the overall goals of the Phase I and II projects.

【ODA loan assistance】

“Maritime safety capability improvement project for the Philippines Coast Guard” (2013-) is a project that procures 10 multipurpose vessels to cover the shortage of vessels at PCG. With the project, PCG will be able to patrol in greater areas. In conjunction with contributions to the capacity development of PCG through Phase I and II projects, particularly in the areas of SAR and MARLEN, they have been bringing about synergies for supporting functions of the PCG. Therefore, ODA loan assistance is considered to be contributing to the achievement of the overall goals of the Phase I and II projects.



Picture 1: Images of technical cooperation, grant aid assistance, and ODA loan assistance

Source: JICA documents

As illustrated above, other forms of cooperation, namely technical cooperation, grant aid assistance, and ODA loan assistance, have been and will be contributing to strengthening other PCG activities through personnel's capacity building and infrastructure development. Therefore, it is expected that they have been and will be contributing to bringing about the impacts of the Phase I and II projects through increases in the number of missions that are indicators of the overall goals of the projects.

Cases in the four areas of SAR, ATON, MARPOL/OSC, and MARLEN are described below.

【SAR】

On August 16, 2013, a ferry, Thomas Aquinas, with 870 crew members and passengers on board leaving Mindanao for Cebu crashed into a cargo ship, Sulpicio, 2 km away from the port of Cebu. This disaster resulted in 116 deaths and 21 people missing. However, PCG was able to save 750 crew members and passengers on board the two vessels.

According to the beneficiary survey¹² administered during the ex-post evaluation with 37 survivors, 31 survivors expressed their satisfaction with PCG's SAR activities because their lives had been saved, while 1 expressed his dissatisfaction because he had to wait in the sea for 4 days to be rescued due to lack of vessels (5 did not express opinions).



PCG personnel searching survivors in Thomas Aquinas

【ATON】

In September 2006, the Philippines became a signatory nation of the "Regional cooperation agreement on combating piracy and armed robbery against ships in Asia" that Japan advocated. Japan relies on the Middle East for approximately 84% (2013) of its oil¹³, and many oil tankers pass through the South China Sea in the West of the Philippines. Because PCG as an enforcement organization of the agreement contributes to the safety of navigation in the South China Sea, it is also considered to indirectly contribute to the energy security of Japan.

【MARPOL/OSC】

On August 11, 2006, a tanker, Solar 1, sank off the coast of Guimaras due to effects of the typhoon and spilled over approximately 0.5 million liters of the approximately 2 million liters of heavy oil it was carrying. It was the biggest marine pollution accident in history. PCG succeeded in dealing with the oil spill in collaboration with the Japanese



PCG dealing with the chemical treatment of the spilled oil

¹² For carrying out the beneficiary survey, the external evaluator obtained information about the survivors from PCG and visited Bolinao in the North West of Luzon where the evaluator was able to meet as many as 37 survivors despite time and financial constraints. The evaluator then obtained responses from all of them through individual interviews.

¹³ Annual statistical review of resources and energy (2013), Ministry of Economy, Trade and Industry of Japan.

expert who was being dispatched to the Phase I project at that time. According to the beneficiary survey¹⁴ administered during the ex-post evaluation to the 7 ship companies that had been salvaged by PCG's MARPOL/OSC activities, 5 companies expressed their satisfactions because PCG succeeded in preventing the spreading of marine environment pollution (2 companies did not express opinions). Similarly, according to the beneficiary survey¹⁵ administered to 3 ship associations, all the associations expressed their satisfactions because PCG succeeded in preventing the spreading of marine environment pollution.

【MARLEN】

Production of illegal drugs is active in the Philippines, and some of them are smuggled to Japan. PCG regularly monitors unidentified ships that may be engaged in the smuggling of illegal drugs based on long-term undercover work and intelligence activities. On February 14, 2007, when PCG spotted an unidentified ship sailing, it chased the ship for over one hour and finally arrested smugglers of illegal drugs off the coast of Talin, Batangas province. Consequently, PCG was able to confiscate 115 million yen worth of illegal drugs from two suspects and prevent them from being sold to other countries including Japan.

3.2.2.2 Other Impacts

There are no other impacts to report.

Although one indicator for the overall goal of the Phase I project has not been achieved, all indicators for the overall goal of the Phase II project have been achieved. As a result of the contributions from other forms of Japanese cooperation made to strengthening PCG's other activities through personnel's capacity building and infrastructure development, excellent impacts have been observed as mentioned above. Their contributions to the overall goals are significant enough to make up for the unachieved indicator, and thus the overall goals of both projects are considered to be achieved.

Overall, as a result of the implementation of the Phase I and II projects, the respective project purposes—that PCG develop personnel's knowledge and skills required to perform its functions and that PCG develops an education and human resource management system—were achieved. In addition, impacts have been observed in the four areas of SAR, ATON, MARPOL/OSC, and MARLEN, and the overall goals have been achieved as planned. Therefore, effectiveness and impacts of the Phase I and II projects are high.

¹⁴ When carrying out the beneficiary survey, the external evaluator contacted more than 10 ship companies located around Manila and visited 7 companies that agreed to take the survey under the condition that the name of the companies would not be made public. The evaluator then obtained responses from 5 of them through individual interviews.

¹⁵ Because ship companies were hesitant, the external evaluator also contacted 3 ship associations located around Manila and visited those that agreed to take the survey under the condition that the name of the associations would not be made public. The evaluator then obtained responses from all of them through individual interviews.

3.3 Efficiency (Rating: ③)

3.3.1 Inputs

The inputs of the Phase I project are as follows.

Inputs	Plan	Actual (at the time of completion)
(1) Experts	Long-term: 5 Short-term: 20-25	Long-term: 9 Short-term: 37
(2) Trainees received	15-20	32
(3) Equipment	Land for constructing a pool for training, equipment, and PC required to transfer knowledge and skills	Construction of a pool for training, echo sounders, navigation system, oil analyzers, drug test kits
Japanese Side Total Project Cost	600 million yen	801 million yen
Philippines Side Operational Cost	Cost for training, human resources, maintenance of equipment, and others	29,499 thousand pesos

Source: JICA documents

The inputs of the Phase II project are as follows.

Inputs	Plan	Actual (at the time of completion)
(1) Experts	Long-term: 4 Short-term: 15-20	Long-term: 6 Short-term: 9
(2) Trainees received	10-15	45
(3) Equipment	Database of human resource management system, equipment for ship operation training, equipment for law enforcement, and others	Database of human resource management system, equipment for ship operation training, equipment for law enforcement, and others
Japanese Side Total Project Cost	360 million yen	280 million yen
Philippines Side Operational Cost	Cost required to operate the project, and others	unknown

Source: JICA documents

3.3.1.1 Elements of Inputs

Following the mid-term evaluation of the Phase I project conducted in July 2005, Output 3—that basic training courses including OJT/unit training are enhanced—was newly added to the project. Consequently, the number of long-term and short-term experts and trainees received in Japan increased to over 150% of the planned number. The provisions of equipment were almost the same as planned.

In the Phase II project, the number of long-term experts increased. Meanwhile, the number of short-term experts decreased because long-term experts did their jobs effectively. The number of trainees received in Japan substantially increased due to the requirement for numerous trainings.

3.3.1.2 Project Cost

The project cost for the Phase I project increased because Output 3 and necessary activities were newly added to the project after the mid-term evaluation, resulting in approximately

134% of the planned project cost. However, the project cost is considered to be efficient because of the following three reasons. Firstly, additional activities resulting from Output 3 were necessary activities to accelerate the achievement of the project purpose. Secondly, despite the fact that the number of experts dispatched and trainees received in Japan became almost 150% of the planned number, all the activities were completed during the project period as planned. Thirdly, as a result of Output 3, materials for basic education course including three sets of materials on ship operations and one set of manual on training on rubber boats were developed.

The project cost for the Phase II project was within the planned project cost, and thus the project cost is considered to be efficient.

Overall, although the project cost of the Phase I project became almost 134% of the planned project cost due to the addition of Output 3, it was efficient for the aforementioned reasons. The project cost of the Phase II project was within the plan.

3.3.1.3 Period of Cooperation

The actual period of the Phase I project was the same as planned from July 2002 to June 2006 despite additional activities resulting from the addition of Output 3.

The actual period of the Phase II project was five years from January 7, 2008 to January 6, 2013, while the original period was five years from January 2008 to December 2012¹⁶.

Therefore, the periods of the Phase I and II projects were same as planned.

Overall, both the project costs and periods were mostly the same as planned. Therefore, efficiency of the projects is high.

3.4 Sustainability (Rating:②)

3.4.1 Related Policy and Institutional Aspects for the Sustainability of Project Effects

“The Mid-Term Philippine Development Plan (2011-2016)” highlights the importance of maritime safety and security in one of the nine priorities, acceleration of infrastructure development. “The PCG 15 Year Development Plan (2000-2015)” continues to be valid.

In addition, the PCG law was created in February 2010. The law gives PCG an official entitlement as the maritime law enforcement organization as well as an independent budget. Consequently, PCG is now able to obtain human resources, procure equipment, and construct facilities on its own.

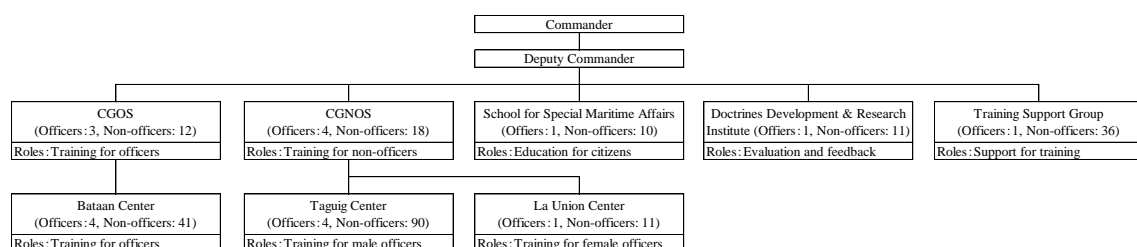
The Phase I and II projects aimed to secure maritime safety and security in the sea near the Philippines and are still in line with the development policies and sector plans of the Philippines

¹⁶ The original period was from January 2008 to November 2012 in the ex-ante evaluation sheet. However, the period agreed on R/D was 5 years from the day of dispatch of the experts. Therefore, the external evaluator used January 2008 to December 2012.

after the completion of the projects. Therefore, it is considered that there is no problem with related policy and institutional aspects for the sustainability of project effects.

3.4.2 Organizational Aspects of the Implementing Agency for the Sustainability of Project Effects

Currently, 230 personnel (27 officers and 203 non-officers) are deployed at CGETC and engage in training for PCG personnel. The courses that the Phase I and II projects developed are taught at the Coast Guard Officer's School (CGOS) and the Coast Guard Non-officers' School (CGNOS). Each school has the number of personnel required for managing the education and training and for teaching courses. Therefore, it is considered that there is no problem with the organizational aspects of PCG for the sustainability of project effects.



Picture 2: Organigram of CGETC

Source: CGETC

When providing education and training for PCG personnel, the superintendent of each school needs to find a PCG officer who may be interested in becoming a course director for managing education and training courses. As is often the case, however, the superintendent has no choice but to select an officer from the officers deployed in Manila because the selected officer needs to perform his/her regular tasks while serving as a course director. The capabilities of the selected course directors also vary because there are no guidelines defining the knowledge and experiences required for course directors. Besides, the assigned course directors select instructors based on his/her own subjective judgement.

Similarly, course directors have no choice but to select instructors from the officers deployed in Manila because instructors need to perform their regular tasks while serving as instructors¹⁷. The capabilities of the selected instructors also vary because no examination certifying the instructors is held, though the PCG ordinance dated May 28, 2012 states the knowledge and experiences required of instructors. Besides, although the database for selecting instructors was established at the time of the project completion as the indicator ① for Output 1 of the Phase I project, it is out of operation

¹⁷ As described in Table 1, the Phase I project established a permanent faculty system, but ended in six months because it did not fit in with the existing career system that required rotations on a regular basis. Due to this, the Phase II project established a concurrent instructor system that could fit in with the system.

due to technical problems¹⁸. Consequently, course directors cannot select instructors based on objective information including the knowledge and experiences of candidate instructors that the database was covering and have no choice but to depend on their own subjective judgement.

Furthermore, the aforementioned PCG ordinance states that instructors must engage in their instruction work for more than three years, but many of them are reassigned within half a year to a year of becoming instructors to another position that makes it difficult, if not impossible, for them to continue to be instructors due to lack of attention to the ordinance by Coast Guard 1 (CG1) in charge of Human Resource Management. Therefore, the concurrent instructor system that was established by the end of the Phase II project as the indicator ① for Output 1 of the Phase II project is not functioning as well as expected.

Because many positive impacts have been observed up to the timing of the ex-post evaluation as described above, the issues mentioned above are not critical to the extent that they prevent the project purposes and the overall goals of the Phase I and II projects from being achieved. However, it should be noted that the achievement of the Output 1 of the Phase II project and the project purpose of the Phase II project that were both attained at the time of the project completion are weaker than before. PCG is planning to increase the number of its personnel from 9,000 in 2015 to 13,500 in 2020, and it requires PCG to stably provide them with high-quality education and training. Therefore, it should be recognized that the issues mentioned above are agendas to be tackled in the future.

3.4.3 Technical Aspects of the Implementing Agency for the Sustainability of Project Effects

The curriculum, the syllabus, the manuals, and the textbooks that the Phase I and II projects developed continues to be used at CGETC and is the foundation for education and training. As described above, however, the levels of the course directors and instructors who teach using the manuals and the textbooks vary. The monitoring and feedback system¹⁹ that was developed as the indicator ⑤ for Output1 of the Phase II project continues to be used for improving training and education. Meanwhile, training courses for trainers for improving ship operations by PCG personnel that the terminal evaluation of the Phase II project suggested have not yet been developed. Therefore, it is recognized that they are an agenda to be tackled in the future (one course will be developed under the “Enhancement of practical capability for maritime law enforcement project II”).

¹⁸ PCG is unable to use the database because its login code and password are missing. PCG has been trying to get in touch with the private programmer that developed the database, but has not been successful.

¹⁹ Students respond to a five-point scale questionnaire (Form A) before taking education and training so that PCG can grasp their prior abilities. They also respond to a five-point scale questionnaire (Form B) after taking it so that PCG can gauge the students’ levels of satisfaction of curriculums, syllabus, manuals, and textbooks as well as with facilities and instructors. Meanwhile, instructors respond to a five-point scale questionnaire (Form C) to perform a self- evaluation. Doctrines Development and Research Institute of CGETC conducts analyses based on the completed questionnaires and takes the necessary actions. In this way, it tries to improve the overall education and training.

The swimming pool for training constructed by the Phase I project is well maintained and used even today. Similarly, although some of the equipment such as oil analyzers that the Phase I and II projects procured are not in use because they have deteriorated, there is no major problem with the operation and maintenance of the equipment because PCG maintains a budget for facilities and equipment as shown below and procures new equipment.



Swimming pool for training

3.4.4 Financial Aspects of the Implementing Agency for the Sustainability of Project Effects

The overall budget of PCG has indicated an increasing trend. The total cost combining the human resource cost and maintenance cost increased from 85,006 thousand pesos in 2013 to 96,811 thousand pesos in 2015. PCG also appropriately allocated facilities and equipment cost on a need basis. Therefore, there is no problem with financial aspects for sustaining the project effects.

Table 6 : Financial status of PCG on the whole and CGETC

	Unit : Thousand pesos		
	2013	2014	2015
PCG	4,670,600	4,387,466	5,613,080
CGETC	124,956	86,666	112,121
Human resource cost	80,333	83,044	92,366
Maintenance cost	4,673	3,622	4,445
Facilities & equipment cost	39,950	0	15,300

Source: PCG

In summary, some minor problems have been observed in terms of the organizational and technical aspects of PCG. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The program consisting of Phase I and II aimed to develop personnel with knowledge and skills required to perform the functions of PCG. For its aim, Phase I developed education and training courses and Phase II developed education and training system at CGETC where PCG provides its personnel with education and training. The implementation of the program was in line with the development policies and needs of the Philippines as well as the development policies of Japan, and thus its relevance is high. The program achieved the project purposes of both the phases: Through Phase I, PCG personnel with the knowledge and skills required to perform their functions were developed and through Phase II, the PCG's education and human resource management system was developed. It has also had great impacts on the four target areas of the program, i.e., SAR, ATON,

MARPOL/OSC, and MARLEN, in conjunction with numerous contributions by other Japanese cooperation. Thus, its effectiveness and impacts are high. The cost and period of the actual program were almost the same as planned, and thus, its efficiency is high. However, the sustainability of the program effects is fair because of the minor problems with the organizational and technical aspects of PCG, which are required to sustain the program effects.

In light of all the above, the program is evaluated to be highly satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

- ① It is recommended that PCG should either repair the database for selecting instructors developed by the project or develop a new one at the earliest so that it can select them in an objective manner.
- ② It is recommended that PCG should develop an examination certifying instructors at the earliest so that it can maintain the quality of all instructors.
- ③ It is recommended that PCG should take appropriate actions to secure three years of serving period as instructors at the earliest so that it can stably provide quality education and training.
- ④ It is recommended that PCG should develop training courses for trainers for improving ship operations by PCG personnel under the “Enhancement of practical capability for maritime law enforcement project II”.

4.2.2 Recommendations to JICA

JICA should monitor PCG’s implementation processes of the aforementioned recommendations and promote them on a need basis so that it can sustain the project purposes and the overall goals.

4.3 Lessons Learned

【Establishment of effective human resource management system】

The Phase I project established a permanent faculty system, but ended it in six months because it did not fit in with the existing career system that required rotations on a regular basis. Therefore, the Phase II project established a concurrent instructor system that fit in with the existing career system. PCG also issued an ordinance that required concurrent instructors to serve as instructors for more than three years. However, many of the concurrent instructors are rotated within half a year to a year of becoming instructors and reassigned to another position due to the lack of attention to the ordinance by CG1. When a technical cooperation project establishes a human resource management system, it is important to contemplate on how it fits in with the existing career system and make it effective on the ground.

Achievements of the Phase I and II projects²⁰

Phase I						
Output 1 ²¹ : PCG strengthens its education and training management system.						
Indicator①	Start of permanent faculty system	(Achieved) Permanent faculty system requiring faculty to serve as faculty permanently was approved by the PCG Commandant in March 2007 before the completion of the Phase I project. However, it ended in six months because it did not fit in with the existing career system that required rotations on a regular basis. Therefore, a concurrent instructor system that could fit in with the existing career system was established under the Phase II project.				
Indicator②	Increase in the number of OJT/unit training	(Achieved) While it was 69 when the Phase I project started in 2002, it increased to 117 in a year before the completion of the Phase I project in 2006.				
		2003	2004	2005	2006	2007
		111	312	248	117	NA
Output 2 ²² : PCG develops training courses and holds seminars in the four areas with participants from other concerned governmental and private organizations.						
Indicator①	Completion of curriculum and syllabus in the four areas	(Achieved) Curriculum and syllabus in the four areas that CGETC developed in consultation with CG12, whose roles were to engage with policy planning on education and training of PCG personnel, were submitted to Education and Training Board consisting of nine executive personnel including the PCG commandant and revised based on the received comments. They were then approved by the PCG commandant before the completion of the Phase I project.				
Indicator②	Development of textbooks and manuals	(Achieved) 24 textbooks and 24 manuals that CGETC developed in consultation with CG12 were revised based on comments from relevant sections and then officially approved, though detailed completion dates were unknown. (SAR: 1 textbook and 4 manuals, ATON: 3 textbooks and 3 manuals, MARPOL/OSC: 1 textbook and 14 manuals, and MARLEN: 19 textbooks and 3 manuals)				
Indicator③	Completion of materials for seminars and publicity	(Achieved) Materials for seminars were the same as the aforementioned textbooks and manuals, and monthly newsletters were issued as materials for publicity.				
Indicator④	Completion of materials for public awareness	(Achieved) Materials for public awareness were the same as the aforementioned materials for publicity.				

²⁰ English expressions of some outputs and indicators have been modified from the original ones.

²¹ There was only one indicator of the annual number of meetings in PDM 1 and PDM 2. However, it was changed to 2 indicators as PDM 3 at the time of the mid-term evaluation in 2005.

²² In PDM 1 and PDM 2, Output 2 was the development of PCG education and training course whereas Output 3 was the number of seminars held. Consequently, the indicators for Output 2 were ① and ② above, and the indicators for Output 3 were ③ and ④ above. However, Output 2 and Output 3 of PDM 1 and PDM 2 were combined as one output (Output 2) in PDM 3 and indicators of ① to ④ were applied to measure the output at the time of the mid-term evaluation in 2005.

Output 3 ²³ : PCG strengthens its basic education courses including OJT/unit training.		
Indicator①	Development and revision of curriculum and syllabus of basic education courses	(Achieved) Curriculum and syllabus of basic education course (consisting of lectures on the mindset as sailors, roles and functions of PCG, and international laws and treaties related to PCG as well as practices of diving and rescue training and rubber boat operations) that CGETC developed in consultation with CG12 were revised based on comments from relevant sections and then completed. In parallel, OJT/unit trainings using constructed facilities, such as the swimming pool, and equipment procured, such as rubber boats, by the Phase I project were also implemented.
Indicator②	Development and revision of manuals, handbooks, and teaching materials of basic education courses	(Achieved) Training materials (3 manuals of ship operations and 1 material of rubber boat training) that CGETC developed in consultation with CG12 were revised based on comments from relevant sections and then completed. They were also incorporated into CGOC and CGOS.

Phase II		
Output 1 ²⁴ : PCG establishes concurrent instructor system		
Indicator①	Establishment of database of PCG personnel on education and training	(Achieved) The database for selecting candidates of instructors was developed while referring to the existing database at PCG. However, it is not operational due to technical problems after the completion of the Phase II project.
Indicator②	Development of the master plan on concurrent instructor system ²⁵	(Achieved) PCG made a Memorandum of Understanding on Cooperation for Education with Philippine Merchant Marine Academy (PMMA) in October 2009. With the MOU, PCG became able to invite PMMA instructors on ship operation skills and engines and to supplement its concurrent instructor system.
Indicator③	Development of career management plan for PCG personnel	(Achieved) The proposal of career management plan for PCG personnel including concurrent instructor system was submitted to and approved by the PCG Commandant in March 2012. Similar to the permanent faculty system, however, the concurrent instructor system is under the existing career system. Because the existing career system still requires that many of concurrent instructors rotate within a year to half a year of becoming instructors, providing stable and high-quality training continues to be an issue for PCG.
Indicator④	Establishment of an appropriate selection system of concurrent instructors	(Achieved) PCG became able to reflect the selection factors of PCG instructors to the database developed under the indicator ① above and consequently to select appropriate instructors. However, the database is not operational due to the aforementioned reason after the completion of the Phase II project.

²³ There were no output 3 and corresponding indicators to the output 3 in PDM 1 and PDM 2. They were added as PDM 3 at the time of the mid-term evaluation in 2005.

²⁴ It was assumed in PDM 1 that PCG would develop a permanent faculty system in which the instructors of CGETC would permanently serve as instructors. However, it did not fit in with the existing career system. Therefore, it was reassumed and readjusted in PDM 2 during the mid-term evaluation in 2011 that PCG would develop a concurrent instructor system in which personnel other than CGETC could become instructors.

²⁵ The master plan on concurrent instructor system meant not only the establishment of a concurrent instructor system at PCG but also the provision of quality education in consultation with PMMA.

Indicator⑤	Improvement of monitoring and feedback system	(Achieved) Students answer a five-point scale questionnaire (Form A) that measures their prior abilities before undertaking the education and training. They also answer a five-point scale questionnaire (Form B) that measures the level of satisfaction with curriculum, syllabus, manuals, and textbooks that the education and training used as well as with facilities and instructors after taking the education and training. Meanwhile, instructors answer a five-point scale questionnaire (Form C) for conducting their own self evaluation. Doctrines Development and Research Institute (DDRI) of CGETC performs analyses based on these forms and takes actions on a need basis. It tries to improve its overall education and training.
Output 2 : PCG develops training programs on MARLEN		
Indicator①	Development and strengthening of new courses on MARLEN for junior and mid-career officers	(Achieved) MARLEN component of CGOC (50 persons per year) that CGETC developed in consultation with Coast Guard 12 (CG12) under Output 3 of the Phase I project was revised and developed into CGSCC (40 persons per year). Courses on MARLEN were thus improved.
Indicator②	Development and strengthening of new courses on MARLEN for non-officers	(Achieved) MARLEN component of CGMC (400 persons per year) that CGETC developed in consultation with CG12 under Output 3 of the Phase I project was revised and developed into MARSEC (50 persons per year). Courses on MARLEN were thus improved.
Indicator③	Integration of international MARLEN seminars into PCG's training programs	(Achieved) International seminar on MARLEN was held during the first year of the Phase II project. However, it was not held after the second year because PCG thought that it would be difficult for PCG to constantly hold it due to lack of manpower. Meanwhile, contents in the seminar, such as basic knowledge on international law enforcement and techniques of law enforcement, are incorporated into PCG's training plan. Therefore, this indicator is considered to have been achieved.
Indicator④	Provision of training in MARLEN for 6 candidates of concurrent instructors	(Achieved) 10 candidates of instructors undertook training in Japan from 2010 to 2011 and became instructors afterwards. Therefore, this indicator is considered to have been achieved.
Output 3 : PCG develops and strengthens training programs of ship operations.		
Indicator①	Development of courses certifying ship operations for officers and non-officers	(Achieved) 8 courses on ship operations for officers and non-officers (Shipboard Familiarization Course, CGOC Shipboard Module, Junior Ship Operational Level Course, Senior Ship Operational Level Course, Deck Specialization Shipboard Module, Engineering Specialization Shipboard Module, Operation Specialization Shipboard Module, and Navigation Course) were developed. However, the number of participants is unknown.
Indicator②	Establishment of PCG's certified courses	(Achieved) Officers and non-officers have to pass the certified exam at the end of the aforementioned courses, and those who pass the exam are given the certification. When these certified courses were developed, they were incorporated by the end of the Phase II project.
Indicator③	Development of standard operation procedures of ships	(Achieved) Guideline on standard ship operations, training evaluation manual, and guide for on-duty officers were developed by the end of the Phase II project and continue to be used.
Indicator④	Development of ship management procedures	(Achieved) The database on ship management including personnel deployment plan, maintenance plan, and procurement plan was developed by the end of the Phase II project and continue to be used.