

Republic of the Philippines

FY2020 Ex-Post Evaluation Report of Japanese Grant Aid Project
“The Project for Enhancement of Coastal Communications Systems”

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

0. Summary

The project was intended to enhance the capability of the Philippine Coast Guard (PCG) for responding to maritime safety and security by developing a satellite communication system between its new districts/major vessels and HQs, as well as a vessel traffic management system in the sea around the Port of Cebu, thereby contributing to assuring maritime safety and security in the coastal areas of the Philippines. The implementation of the project has been highly relevant to the Philippines’ development plan and development needs, as well as Japan’s ODA policy. Therefore, its relevance is high. Although the project cost was within the plan, the project period was significantly longer than planned. Therefore, efficiency of the project is fair. As a result of the project, the PCG’s capabilities for responding to maritime safety and security in maritime search and rescue (MARSAR), maritime law enforcement (MARLEN), and maritime environmental protection (MAREP) have been enhanced, while synergies with other JICA projects have also been observed. In addition, the project contributes to the “Free and Open Indo-Pacific (FOIP),” the diplomatic and national security policy of Japan. Therefore, effectiveness and impacts of the project are high. However, there are partial problems with the current status of operation and maintenance. Therefore, sustainability of the project effects is fair.

In light of the above, this project is evaluated to be satisfactory.

1. Project Description



Project Locations



Portable VSAT for emergency use

1.1 Background

The PCG is an external bureau of the Department of Transportation responsible for maritime

safety and security in the coastal areas of the Philippines,¹ e.g., MARSAR, MARLEN, and MAREP. However, the infrastructure and human resources at the PCG's disposal are far from sufficient to assure maritime safety and security of the island country with over 7,000 islands and a coastline of over 3,500 km. Thus, JICA has been implementing numerous cooperation of ODA loan projects, grant aid projects, and technical cooperation projects.

1.2 Project Outline

The objective of this project was to enhance the PCG's capability for responding to maritime safety and security by developing a satellite communication system between its new districts (Coast Guard District Northeastern Luzon [CGDNEL] and Coast Guard District Eastern Visayas [CGDEV])/major vessels and HQs, as well as a vessel traffic management system in the sea around the Port of Cebu, thereby contributing to assuring maritime safety and security in the coastal areas of the Philippines.

<Grant Aid Project>

Grant Limit / Actual Grant Amount		1,152 million yen / 1,114 million yen
Exchange of Notes Date/ Grant Agreement Date		March 2014 / April 2014
Executing Agency		Philippine Coast Guard (PCG)
Project Completion		November 2017
Target Areas		Manila (HQs), Tuguegarao (CGDNEL), Tacloban (CGDEV), Cebu
Main Contractors	Construction	Consortium of Toyota Tsusho Corporation and Toyo Construction Co., Ltd
	Equipment	Japan Radio Co., Ltd
Main Consultant		Oriental Consultants Global Co., Ltd
Preparatory Survey		June 2013 – March 2014
Related Projects		[Grant Aid Project] “Project for Enhancement of Communications System for Maritime Safety and Security” (2007-2009) [ODA Loan Projects] “Coastal Communication System Project (I)” (1989-1996) “Maritime Safety Improvement Project (I)” (1991-1996) “Maritime Safety Improvement Project (II)” (1995-2001) “Maritime Safety Capability Improvement Project for the Philippine Coast Guard (I)” (2013-2018) “Maritime Safety Capability Improvement Project for the Philippine Coast Guard (II)” (2016-Present)

¹ It was the responsibility of the Department of Transportation until the PCG was established in 2009 by *the Republic Act No. 9993*.

	[Technical Cooperation Projects] “Philippine Coast Guard Human Resource Development” (2002-2007) “Philippine Coast Guard Education and Human Resource Management System Development Project” (2008-2013) “Enhancement of Practical Capability for Maritime Law Enforcement Project” (2013-2016) “Project for Comprehensive Practical Capability Improvement for Maritime Law Enforcement” (2016-2019) “Project for Enhancement of Vessel Operation and Maintenance Planning Capability for Philippine Coast Guard” (2019-Present) “Coast Guard Administration (experts)” (2003-2006, 2006-2009, and 2009-2013) “Maritime Safety and Security Policy Program” (2015-Present)
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2. Outline of the Evaluation Study

2.1 External Evaluator

Koichiro Ishimori, Value Frontier Co., Ltd

2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: November 2020 – January 2022

Duration of the Field Study: N/A

2.3 Constraints during the Evaluation Study

Due to the COVID-19 pandemic, the external evaluator could not visit the Philippines, thus all the study was conducted remotely with the help of a local assistant in the country. Consequently, a detailed analysis of the project’s impact on the diplomatic and national security policy of Japan in the section of “Other Positive and Negative Impacts” could not be made. In addition, the current status of operation and maintenance of the procured equipment could only be checked through questionnaires and online meetings.

3. Results of the Evaluation (Overall Rating: B²)

3.1 Relevance (Rating: ③³)

3.1.1 Consistency with the Development Plan of the Philippines

“Philippine Development Plan 2011–2016” (2011), the national development plan at the time of ex-ante evaluation, stated “safer and more secured environment created and sustained” in one of its priority areas, “accelerating infrastructure development.” As a means to achieve this goal, the plan mentioned “implementation of safety measures, “including “upgrading equipment and capacity building of the PCG personnel for assuring maritime safety and security.” In addition, the “PCG 15 Year Development Plan 2000-2015” (2000), the sector plan, raised “expansion of communication network that was necessary for maintaining safety and security and crackdown

² A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

³ ③: High, ②: Fair, ①: Low

on crimes at sea” as one of its priority measures and intended “development of a communication system.”

“*Philippine Development Plan 2017–2022*” (2017), the national development plan at the time of ex-post evaluation, states “strategic infrastructure development” in one of its priority areas, “accelerating infrastructure development.” As a means to achieve this, it mentions “the adoption of a security structure to eliminate threats to lives and properties of the people” and intends to “gain control over the coastal areas of the Philippines by the PCG.” In addition, the “*PCG Strategic Development Plan 2020–2028*” (2020), the sector plan, states “development of a coastal communication system, such as a satellite communication system and a vessel traffic management system” as one of its priority measures and intends to “enhance the capability for responding to maritime safety and security in an effective and rapid manner.”

Since the project was intended to develop a satellite communication system and a vessel traffic management system to enhance the PCG’s capabilities for responding to maritime safety and security, it is judged that the project was and is consistent with the development plans of the Philippines at the time of ex-ante and ex-post evaluations.

3.1.2 Consistency with the Development Needs of the Philippines

Since the Philippines is an island country consisting of over 7,000 islands, vessels were widely used for transporting people and goods between islands at the time of ex-ante evaluation. Meanwhile, the risk of accidents, crimes, navigational safety, and environmental pollution at sea was increasing because the number of vessels overloaded with people and goods and deteriorated vessels were increasing to meet the increased demand for transportation caused by socio-economic development.

At the time of ex-post evaluation, the number of passengers traveling islands by vessel increased from 53,316,054 in 2013 to 76,798,175 in 2018, and the volume of goods transported increased from 77,951,768 tons in 2013 to 105,390,180 tons in 2018.⁴ Therefore, the importance of preventing accidents, cracking down on crimes, navigational safety, and conserving the marine environment is also increasing.

Since the project was intended to decrease the aforementioned risk by developing a satellite communication system and a vessel traffic management system, it is judged that the project was and is consistent with the development needs of the Philippines at the time of ex-ante and ex-post evaluations.

3.1.3 Consistency with Japan’s ODA Policy

The “*Japan’s ODA Charter*” (2013) at the time of ex-ante evaluation stated “good governance through infrastructure development” as the precondition for realizing sound economic growth

⁴ 2018 Annual Statistical Report, Philippine Statistics Authority

and highlighted “support for infrastructure development.” The “*Japan’s Medium-Term Policy on Official Development Assistance*” (2005) stated “sustainable growth” as its priority area and highlighted “support for transport infrastructure including ports” by articulating “the essential importance of infrastructure for promoting activities by private sectors” in the section of “approaches for sustainable growth and concrete measures.” Furthermore, the “*Country Assistance Policy for the Philippines*” (2012) stated “sustainable economic growth through promotion of investments” and articulated “support for building the capability of assuring maritime safety and security.”

Since the PCG was the maritime law enforcement organization in the Philippines and the project was intended to enhance its capability for responding to maritime safety and security, it is judged that the project was consistent with Japan’s ODA policy.

In sum, this project has been highly relevant to the Philippines’ development plan and development needs, as well as Japan’s ODA policy. Therefore, its relevance is high.

3.2 Efficiency (Rating: ②)

3.2.1 Project Outputs

Table 1 below summarizes the planned and actual major outputs of the project.

Table 1: Planned and Actual Major Outputs of the Project

Outputs	Plan	Actual
Satellite Communication System		
Portable VSAT ⁵ for emergency use	5 units	Same as planned
Inmarsat ⁶ for major vessels	19 units	Same as planned
Vessel Traffic Management System		
Cebu VTMS ⁷ Control Center	1 location	Same as planned
Radar stations	3 locations	Same as planned
Radar system	3 locations	Same as planned
CCTV ⁸ camera system	4 units	Same as planned

Source: Materials provided by JICA and PCG

3.2.2 Project Inputs

3.2.2.1 Project Cost

The planned Japanese cost was 1,152 million yen, whereas the planned Philippine cost was 52.3 million pesos. The actual Japanese cost was 1,114 million yen, whereas the actual Philippine cost was unknown because of a lack of records. Therefore, it is not possible to compare total costs. When comparing the Japanese costs, the actual cost was 97% of the

⁵ VSAT stands for Very Small Aperture Terminal. It is the system of bidirectionally transmitting voices and data at the regional level via a stationary satellite that uses Ku-band frequency.

⁶ Inmarsat is the system of bidirectionally transmitting voices and data at the global level via a stationary satellite that uses L-band frequency.

⁷ VTMS stands for Vessel Traffic Management System. It is the system to trace and monitor movement of navigating vessels on a real time basis.

⁸ CCTV stands for Closed-Circuit Television.

planned cost, and thus lower than it had been planned. Details are as follows.

Table 2: Planned and Actual Costs of the Project

	Plan	Actual
Japanese costs	1,152 million yen	1,114 million yen
	Construction work: 237 million yen	Construction work: 464 million yen ⁹
	Equipment procurement: 796 million yen Design and supervision: 119 million yen	Equipment procurement: 523 million yen ¹⁰ Design and supervision: 127 million yen ¹¹
Philippine costs	52.3 million pesos (\approx 130 million yen ¹²)	Unknown
	-Bank charge: 0.5 million pesos	-Bank charge: unknown
	-Charge for connecting utilities: 0.4 million pesos -VAT and import taxes: 51.4 million pesos	-Charge for connecting utilities: unknown -VAT and import taxes: unknown

Source: Materials provided by JICA and PCG

3.2.2.2 Project Period

The planned project period was 26 months from April 2014 (G/A agreement) to May 2016, whereas the actual period was 44 months from April 2014 (G/A agreement) to November 2017, thus becoming 169% of the planned period, which was significantly longer than it had been planned. These eighteen months of the delay were because of the following four reasons:

- 1) The negotiation over the contract for consultants took place over the long holidays, resulting in a delay of half a month.
- 2) The detailed design took five months longer to develop than estimated. Although the planned period for making and approving tender documents was estimated to be a month and a half, it took five months because it had taken time to receive the approval, resulting in a delay of three months and a half. In addition, the bidding period was extended from a month and a half to three months, resulting in a delay of a month and a half. This was because the bidding condition required formulating a consortium of a trading company and a general contractor, however, it was difficult to find general contractors who could cooperate for the project during the high demand caused by the Tokyo Olympic Games.
- 3) It took time to coordinate the land lease agreement with the government agencies (Cebu Port Authority (CPA), Department of Public Works and Highways, and Philippine Economic Zone Authority) that own the land where the Cebu VTMS Control Center (CVCC) (one location) and radar stations (three locations) will be constructed, and agreements were not

⁹ The increase of 227 million yen was because of the following three reasons. 1) The December 2014 typhoon washed away a part of the construction site of Inter-Bridge Radar Station that was one of the radar stations and necessitated revetment work at the construction site. 2) Waste sediments were found after the trial digging at the construction site of Inter-Bridge Radar Station. Since it was judged that the ground was weak for a building foundation, construction work for ground stabilization was implemented. 3) Emergency stairs, not emergency ladders that had been planned, were installed at the control center, as instructed by the Cebu Fire Department.

¹⁰ The decrease of 273 million yen was due to competition in bidding.

¹¹ The increase of 8 million yen was due to 1) and 2) mentioned in footnote 9.

¹² Calculated using the exchange rate at the time of making the preparatory survey report.

reached by the start of the construction. Consequently, obtaining a construction permit that was supposed to have been obtained by the start of the construction was delayed by 12 months.

- 4) Additional revetment work was undertaken, resulting in a delay of half a month in construction.

In sum, although the project cost was lower than planned, the project period significantly exceeded the plan. Therefore, efficiency of the project is fair.

3.3 Effectiveness and Impacts¹³ (Rating: ③)

3.3.1 Effectiveness

3.3.1.1 Quantitative Effects (Operation and Effect Indicators)

Table 3: Quantitative Effects

	Baseline	Target	Actual Figures			
	2013	2020	2017	2018	2019	2020
	-	3 years after completion	Completion year	1 year after completion	2 years after completion	3 years after completion
1) Number of PCG Coast Guard Districts where VSAT is introduced	10	12	12	12	12	12
2) Number of PCG vessels where Inmarsat is introduced	0	19	19	19	19	19
3) Coverage areas by VTMS in the sea around the Port of Cebu (%)	0	100	100	100	100	100
4) Coverage rate of vessels navigating in the Mactan Channel (%)	0	-	100	100	100	100

Source: Materials provided by JICA and PCG

- 1) The number of PCG Coast Guard Districts where VSAT is introduced

VSAT has been introduced into CGDNEL and CGDEV as planned.

- 2) The number of PCG vessels where Inmarsat is introduced

Inmarsat has been introduced into 19 vessels as planned.

- 3) The coverage areas by VTMS in the sea around the Port of Cebu

VTMS that has been introduced into CVCC provides 100% coverage of approximately 10 nautical miles (18.52 km) of the sea from the Port of Cebu as planned.

- 4) The coverage rate of vessels navigating in the Mactan Channel

VTMS that has been introduced into CVCC monitors all vessels coming in and out of the Mactan Channel.

¹³ Sub-rating for Effectiveness is to be put with consideration of Impacts.

3.3.2 Impacts

3.3.2.1 Intended Impacts (Quantitative impacts)

Table 4: Quantitative Impacts

	Baseline	Actual Figures			
	2013	2017	2018	2019	2020
	-	Completion year	1 year after completion	2 years after completion	3 years after completion
1) Rate of MARSAR missions dispatched to coastal areas of the Philippine Sea ¹⁴ (%)	NA	NA	100	100	100
2) Rate of MARLEN missions dispatched to the coastal areas of the Philippine Sea (%)	NA	NA	100	100	100
3) Rate of MAREP missions dispatched to the coastal areas of the Philippine Sea (%)	NA	NA	0	100	0
4) Number of collisions between vessels in the Mactan Channel (case)	1	0	3	0	0

Source: Materials provided by JICA and PCG

1) – 3) The rate of MARSAR, MARLEN, and MAREP missions dispatched to the coastal areas of the Philippine Sea (%)

There is no record available in 2017 since the project was completed in November 2017. However, the rate of dispatch in each mission after 2018 was 100%, with the exception of 0% for MAREP missions in 2018 and 2020, because there was no such incident. The 44-meter multi-role response vessels that were procured by the ODA loan project, “Maritime Safety Capability Improvement Project for the Philippine Coast Guard (I)” (2013–2018), which was implemented to supplement the shortage of the PCG vessels during the same period as this project, also contributed to these actual figures.

4) The number of collisions between vessels in the Mactan Channel (case)

Three collisions happened in 2018 because navigating vessels did not keep the Automatic Identification System (AIS) switched on and did not pay due attention, both of which were factors unrelated to the effectiveness of VTMS. Since there was no collision in other years, it is judged that the impact of the project is realized.

¹⁴ Since VSATs that were introduced into CGDNEL and CGDEV contribute to the PCG’s capabilities for responding to maritime safety and security particularly in the coastal areas of the Philippine Sea, the area was set to the Philippine Sea.

(Qualitative impacts)

1) A system of command is secured between the PCG's major vessels and HQs/Coast Guard Districts through satellite communication system

As a result of introducing Inmarsat into 19 PCG vessels by the project, they can communicate with HQs and Coast Guard Districts (CGDs) through HQs even in environments without telephone and radio connectivity. Thus, a system of command is secured between the PCG's major vessels and HQs/CGDs through a satellite communication system.

2) Safety of vessels navigating in the sea around the Port of Cebu is improved

As a result of installing three radar stations around the Port of Cebu by the project, the CVCC can catch and monitor the location information on vessels navigating in the sea around the Port of Cebu. In addition, VTMS can easily identify vessels that are anchoring without permission and have exceeded their anchoring period at the Port of Cebu and crack down on them. Thus, the safety of vessels navigating in the sea around the Port of Cebu and in the Port is improved.

3.3.2.2 Other Positive and Negative Impacts

1) Impacts on the Natural Environment

The environmental category of the project was C, and the project had no impact on the natural environment.

2) Resettlement and Land Acquisition

Since all the construction sites were in the territory owned by either PCG or government agencies, no resettlement or land acquisition was required.

3) Unintended Positive/Negative Impacts

The Ministry of Foreign Affairs of Japan promulgates "FOIP" as its diplomatic and national security policy and promotes "a free and open Indo-Pacific region as international public goods through ensuring the rule-based international order, freedom of navigation, peaceful resolution of conflicts, and promotion of free trade." The Ministry raises three pillars to realize this: (1) promotion and establishment of the rule of law, freedom of navigation, free trade, etc.; (2) pursuit of economic prosperity (improving connectivity and strengthening economic partnerships, including economic partnership agreements, free trade agreements, and investment treaties); and (3) Commitment to peace and stability (capacity building on maritime law enforcement, humanitarian assistance/disaster relief cooperation, etc.).

The PCG conducts activities that contribute to ensuring freedom of navigation, peace, and stability in areas such as the South China Sea, where there are ongoing territorial disputes.

Since this fits with the tenets of FOIP, the project also contributes to Japan's diplomatic and national security policy.

The targets of operation and effect indicators 1) to 3) in quantitative effects of effectiveness have all been achieved, and the actual figures of operation and effect indicator 4) have reached 100%. Therefore, project's effectiveness is high. Regarding indicators 1) to 3) concerning the rate of dispatched missions in the quantitative effects of impacts, impacts were realized through synergies with the ODA loan project implemented during the same period as this project. Regarding indicator 4) on the number of collisions between vessels in the Mactan Channel, zero cases were maintained with the exception of 2018. As for qualitative indicators, a system of command is secured between the PCG's major vessels and HQs/CGDs through a satellite communication system, and the safety of vessels navigating in the sea around the Port of Cebu is also improved. Furthermore, the project also contributes to Japan's diplomatic and national security policy.

In sum, this project has achieved its objectives. Therefore, effectiveness and impacts of the project are high.

3.4 Sustainability (Rating: ②)

3.4.1 Institutional Aspect of Operation and Maintenance

The PCG's activities are stipulated by the *Republic Act No. 9993 (2009)*. The CVCC also carries out activities based on this Act. For instance, the PCG staff conduct pre-departure inspection (PDI) for all commercial vessels leaving the Port of Cebu to check if they are not overloaded with people and goods and are well maintained. They also provide guidance for vessels arriving at the port for a safe navigation route to the berth where they anchor.

3.4.2 Organizational Aspect of Operation and Maintenance

3.4.2.1 Satellite communication system

The satellite communication system is operated and maintained by the Coast Guard Weapons Communications, Electronics, and Information System Services (CGWCEISS). A total of 422 personnel work at CGWCEISS at the time of ex-post evaluation, which is 2.5 times of the number of personnel at the time of ex-ante evaluation. The number of communication engineers, who are full-time personnel with the national certification for Electronic and Communication Engineers, has also increased to 10, which is 2.5 times the number of engineers at the time of ex-ante evaluation. VSATs that were introduced into CGDNEL and CGDEV by the project are operated and maintained by the CGWCEISS personnel deployed to them.

3.4.2.2 Vessel traffic management system

VTMS that was introduced into the CVCC is operated and maintained around the clock by eight PCG personnel deployed to the Coast Guard District Central Visayas (CGDCV) in four shifts. Additionally, seven CPA personnel perform administrative work for vessels coming in and out of the port for eight hours during the daytime. The VTMS is maintained by five CGWCEISS personnel deployed to the CGDCV. Any problems that arise with the VTMS will be fixed by its maker, Japan Radio Co., Ltd.

3.4.3 Technical Aspect of Operation and Maintenance

3.4.3.1 Satellite communication system

As for the portable VSATs for emergency use, the training for maintenance was provided for 15 communication engineers at CGWCEISS from October 27, 2016, to October 28, 2016, during the project period. As for the Inmarsat, the training for operation was provided for communication personnel and 204 crew members of 19 ships with Inmarsat from April 15, 2016, to June 6, 2016, while the training for maintenance was provided for eight communication engineers at CGWCEISS on April 14, 2016.

After the completion of the project, the communication engineers at CGWCEISS conduct training for operation and maintenance of the portable VSATs for emergency use and the Inmarsat, using manuals such as the “*Simple Instruction Manual for VSAT Communication System*” and “*INMARSAT Quick Reference Guide*,” as necessary. Therefore, the skills are embedded in the PCG.

3.4.3.2 Vessel traffic management system

As for the VTMS, the training for operation was provided for 30 operators at CVCC from October 9, 2017, to November 10, 2017, during the project period, while the training for maintenance was provided for nine communication engineers at CGWCEISS from October 9, 2017, to November 16, 2017.

After the completion of the project, CGWCEISS conducts training for operation and maintenance of the VTMS by using manuals such as “VTMS Training Manual,” as necessary. Therefore, the skills are embedded in the PCG.

3.4.4 Financial Aspect of Operation and Maintenance

3.4.4.1 Satellite communication system

It was estimated that the communication charge for the Inmarsat would cost 2 million pesos annually (approximately 5 million yen), and the maintenance charge for the portable VSATs for emergency use and the Inmarsat would cost 1.5 million pesos annually (approximately 3.75 million yen), so the annual total cost was estimated to be 3.5 million pesos (approximately 8.75 million yen). This cost is to be borne by the PCG. It is only about 1.8% of the annual average

budget for the past three years for operation and maintenance at the section of Coast Guard 11 (CG11), which oversees the administration of the satellite communication system. According to CG11, it has been able to secure the budget without any problem.

Table 5: Budget for Operation and Maintenance at PCG (CG11)

(Unit: 1,000 pesos)

	2018	2019	2020
Budget for O&M	123,269	223,850	235,000

Source: PCG

3.4.4.2 Vessel traffic management system

It was estimated that the service contract with the maker for operation and maintenance of the VTMS would cost 3.5 million pesos annually (approximately 8.75 million yen), while the repair and spare parts would cost 4.7 million pesos annually (approximately 11.75 million yen). The PCG and the CPA were supposed to share these costs based on their agreement. The CPA had planned to collect VTMS fees from vessels to contribute as its share, however, this has not been realized at the time of ex-post evaluation. Consequently, the PCG (CG11) covers all costs on account of the importance of navigational safety in the sea around the Port of Cebu. The total amount of 8.2 million pesos (approximately 20.50 million yen) is only about 4.2% of the annual average budget for the past three years for operation and maintenance at the CG11 section. According to CG11, it has been able to secure the budget without any problem.

3.4.5 Status of Operation and Maintenance

The table below summarizes the current status of operation and maintenance of the portable VSATs for emergency use, the Inmarsat, and the VTMS. As for the portable VSATs for emergency use, the PCG has not renewed a service contract with a provider. Consequently, it is in a situation where VSATs cannot be used on an occasion of an emergency requiring their use, which results in a problem with emergency communications. Similarly, it has not renewed a service contract of the VTMS with a provider. Consequently, it is in a situation where the built-in radio communication device is out of order, which results in a problem with communications with navigating vessels. These problems negatively influence the project's effectiveness, the PCG's capabilities for responding to maritime safety and security.

Table 7: Current Status of Operation and Maintenance

Equipment	Operation Status	Maintenance Status
Portable VSATs for emergency use	Since August 2019, PCG has not renewed a service contract with a provider because it has not partially performed the contract. Therefore, PCG cannot use VSATs now.	No problem
Inmarsat	No problem	
VTMS	No problem	Since December 2020, PCG has not renewed a service contract with a provider. Therefore, the built-in radio communication device is out of order now.

Source: PCG

The *Republic Act No. 9993 (2009)* is the law effective in providing the basis for the PCG's activities, and there is no problem with the institutional aspects of operation and maintenance. The satellite communication system and the vessel traffic management system are well operated and maintained. In addition, skills for operation and maintenance are also embedded in the PCG through training using manuals. Therefore, there is no problem with the organizational and technical aspects of operation and maintenance. Likewise, there is no problem with the financial aspects because PCG secures the budget for operation and maintenance. However, since August 2019, the PCG has not renewed a service contract with a provider. Consequently, it is in a situation where VSATs cannot be used on an occasion of an emergency requiring their use, resulting in a problem with emergency communications. Similarly, it has not renewed a service contract of the VTMS with a provider. Consequently, it is in a situation where the built-in radio communication device is out of order, which results in a problem with communications with navigating vessels.

In sum, some minor problems have been observed in terms of the current status. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The project was intended to enhance the PCG's capabilities for responding to maritime safety and security by developing a satellite communication system between its new districts/major vessels and HQs, as well as a vessel traffic management system in the sea around the Port of Cebu, thereby contributing to assuring maritime safety and security in the coastal areas of the Philippines. The implementation of the project has been highly relevant to the Philippines' development plan and development needs, as well as Japan's ODA policy. Therefore, its relevance is high. Although the project cost was within the plan, the project period was significantly longer than planned.

Therefore, efficiency of the project is fair. As a result of the project, the PCG's capabilities for responding to MARSAR, MARLEN, and MAREP have been enhanced, while synergies with other JICA projects have also been observed. In addition, the project contributes to the "FOIP," the diplomatic and national security policy of Japan. Therefore, effectiveness and impacts of the project are high. However, there are partial problems with the current status of operation and maintenance. Therefore, sustainability of the project effects is fair.

In light of the above, this project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

Since August 2019, the PCG has not renewed a service contract with a provider. Consequently, it is in a situation where VSATs cannot be used on an occasion of emergency requiring their use, which results in a problem with emergency communications. Therefore, it is expected that the PCG should renew it at the earliest possible time.

Similarly, since December 2020, it has not renewed a service contract of the VTMS with a provider. Consequently, it is in a situation where the built-in radio communication device is out of order, which results in a problem with communications with navigating vessels. Therefore, it is expected that the PCG should renew the contract and fix it at the earliest possible time.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

Making a plan to secure construction sites and following up on its progress

The PCG was supposed to have made land lease agreements with the landowners of the construction sites by the start of the construction, but it could not do so. Consequently, the start of the construction was delayed by 12 months. Securing construction sites is, in principle, the responsibility of the recipient government. However, this can have a significant effect on the entire project. Therefore, in a case where the landowner of a construction site is different from the executing agency, it is important for JICA to demand that the executing agency make a plan to secure the construction site from the stage of the preparatory study and then proactively follow up on the progress of the plan with the executing agency.