

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Keisuke NISHIKAWA (Ernst & Young Sustainability Co., Ltd.)	Duration of Evaluation Study
Project Name	The Project for Improvement of the Security Equipment in Major Airports and Ports Facilities	October,2011 - April, 2012

I Project Outline

Country Name	Republic of Indonesia	
Project Period	July, 2004 – February, 2006	
Executing Agency	Directorate General of Air Communications, Ministry of Communications Directorate General of Sea Communications, Ministry of Communications	
Project Cost	Grant Limit: 747million yen	Actual Grant Amount: 672million yen
Main Contractors	(Procurement) Airport: Mitsubishi Corporation, Port: KANTO BUSSAN	
Main Consultants	PACIFIC CONSULTANTS INTERNATIONAL	
Basic Design	October, 2003 – March, 2004	
Related Projects (if any)	<p>< Yen Loan> 1996-2006 Surabaya Airport Construction Project 1998-2006 Palembang Airport Development Project (I) 1998-2006 Dumai Port Development Project (II) 2007 Project of Local Airports Security and Safety Improvement (SAPROF) 1998-2009 Small Ports Development Project In Eastern Indonesia 2001-2009 Maritime Education And Training Improvement Project < Grant Aid> 2008- Project for Improvement of Port Security System 2010- Project for Airport Security System Improvement < Technical Cooperation> 2001-2003 The Study for Development of The Greater Jakarta Metropolitan Ports of Indonesia 2003-2004 The Master Plan Study for the Strategic Policy of the Air Transport Sector</p>	<p>2005 Study on Major Airports Security System Enforcement Plan 2006-2007 Contingency Exercise on Airport Security 2006-2008 Port Security Management Project (Phase I) 2009-2011 Port Security Management Project (Phase II) 2009-2011 Project for Improvement of Maritime Transport Safety 2010-2015 Project for Improvement on Aviation Safety Policy <Other International Organizations and Donors> [Australia, USA] 2003- Survey on Capacity Development for Aviation Security and Counterterrorism (Soekarno-Hatta & Denpasar Airports) [USTDA] Survey on Security at Airports & Ports (Tanjung Priok Port and Batam Airport) [Australia] Training for Immigration Officers and Provision of Equipment for Passport Control [IOM] Technical Cooperation on Border Management</p>
Project Background	<p>As the Republic of Indonesia is an archipelago nation consisting of 15,000 islands spreading across a sea area of 5,000 km from east to west, air transportation and sea transportation play extremely important roles in the stability of the citizens' life and economic activities.</p> <p>The country suffered a series of bombing attacks: the Bali terrorist explosions in October 2002 and the bomb explosion at Soekarno-Hatta International Airport in Jakarta in April 2003. In response to these attacks, the Indonesian government has been taking nationwide counterterrorism measures, including the establishment of the Antiterrorist Law in April 2003. In particular, there is an urgent need for the enhancement of security measures for airports and ports that are likely to be targeted by terrorists.</p> <p>However, the capabilities for airport/port security are falling due to their functional decline with age or the breakdown of security devices such as X-ray screening systems that are essential to maintaining airport/port security. In addition, the overall system of maintaining security also has problems, including insufficient security screening and monitoring.</p> <p>Based on this background, the Ministry of Communications of the Indonesian Government, while establishing/reviewing its airport/port security plans, formally requested Japanese grant aid to procure the necessary equipment to enhance security at major airports/ports.</p>	
Project Objective	The objective of this project is to improve the security measures of airports/ports by providing of security devices such as X-ray screening systems in selected major airports and ports.	

Output (Japanese Side)	<Equipment>								(2) Port (3 ports)								
	(1) Airport (7 airports)																
	Equipment	Unit	Number of Equipment Provided						Number of Equipment Provided								
			Denpasar	Balikpapan	Makassar	Yogyakarta	Manado	Soekarno-Hatta	Medan	Tanjung Priok	Tanjung Perak	Batam Port					
	Batam Center	Sekupang										Waterfront	Nongsa				
	X-ray Check-in Baggage Screening System	Set	2	1	1	-	-	8	2	CCTV System	Set	1	1	-	-	-	-
	X-ray Cabin Baggage Screening System	Set	4	-	1	1	-	13	2	X-ray Screening System (middle size)	Set	2	2	-	-	-	-
	X-ray Cargo Screening System	Set	1	1	-	-	-	2	1	X-ray Screening System (small size)	Set	-	-	-	1	1	1
	Walkthrough Metal Detector		5	1	1	1	-	14	2	Walkthrough Metal Detector		-	2	-	-	-	1
	Desktop Explosives Detector		2	-	-	-	-	2	-	Handheld Metal Detector		-	-	1	2	1	2
Handheld Explosives Detector		1	1	1	1	1	1	2									
<Technical Assistance Component (technical guidance, etc.)>																	
(1) Guidance and advice concerning airport security operations																	
(2) Technical guidance at seminars and workshops on port security measures / Guidance and advice on port security operations																	

II Result of the Evaluation

Summary of the evaluation

This project aimed to improve airport/port security through the provision of security equipment. The Indonesian Government's determined policy for security as a countermeasure against bombing attacks and other forms of terrorism has been consistently indicated since the project planning. Ensuring security at airports/ports has been an important task from the perspective of gaining external trust and the avoidance of negative impacts on economy. Furthermore, Japan regarded "peace and stability" as a priority area of its assistance to Indonesia, and it was planning to support Indonesia's development of counterterrorism measures. Accordingly, the overall relevance of this project was high.

The outputs of this project were achieved as planned. In order to achieve these outputs, the project costs were lower than the planned amount and the project period was also as planned without any problems. Therefore, the overall efficiency can be said to be high.

As a result of the implementation of this project, hazardous objects are detected more frequently than before and the level of confidence in safety among the airport and port staff has improved. After the implementation of the project, no serious security-related incidents have occurred at the airports and ports covered under this project. It can be presumed that certain effects have been generated including the deterrent effect to prevent hazardous objects to be brought on to planes and ships.

As to Sustainability, as the technical capacity of the security staff has been improved through JICA's technical cooperation projects both at airports and ports, there are no serious problems in their routine operation and maintenance activities. Financial statuses were also sound at least at the airports and ports in the metropolitan area. Operation and maintenance conditions of the equipment had some issues at the ports in that the property rights of port security equipment has not been transferred to PELINDO, and also in that many of the equipment (CCTV cameras and X-ray Screening System) were out of order. At the airports, many of the explosives detectors were not in use, but the X-ray Screening System and Metal Detectors were always utilized and repaired appropriately.

In light of the above, the evaluation of this project is high.

<Recommendation to the Executing Agency>

(Airports)

- Although the Explosives Detectors are not in use at most of the airports, it is desirable that they are always in operating conditions in light of the importance of security at those key infrastructural facilities.

(Ports)

- It is essential to repair the X-ray Screening System that was out of order at the time of Ex-post Evaluation. Also, as the cables of the CCTV monitoring system were severed during the road construction works, leading to the reduction of project effects, it is necessary to exchange more information with other departments and also with the contractors and pay careful attention when the civil works were implemented inside the port area.
- It is desirable to transfer the property rights of the port security equipment (asset) from the Ministry of Transportation to PELINDO so that the equipment will be proactively managed by PELINDO.

<Lessons Learned>

- The technical capacity of the staff in charge of operation and maintenance has been developed as a result of the implementation of technical cooperation projects following the provision of equipment in this project. This arrangement was effective to increase the effects of this project.

<Limitations of the evaluation study>

In the analysis of quantitative effects, it was not possible to compare the actual results to the planned figures due to the lack of data such as screening accuracy and the record on the confiscation of hazardous items.

With respect to financial information, it was difficult to obtain operation and maintenance budget details from 10 airports and ports as these corporations were under the Ministry of State Owned Enterprises while the executing agency of this project was the Ministry of Transportation. Therefore, the evaluation was conducted based on the data obtained only from Soekarno-Hatta Airport and Tanjung Priok Port, where on-site surveys were carried out during the visit of the evaluator.

An analysis of operation and maintenance conditions of the equipment provided under this project at the airports and ports other than Soekarno-Hatta Airport and Tanjung Priok Port is based on the answers by the executing agency as the actual visit to these facilities could not be made during this study.

1 Relevance

(1) Relevance with the Development Policy of the Republic of Indonesia

At the time of the project planning, the importance of “Peace and Stability” was indicated in National Development Program 2000-2004 (PROPENAS). In the area of airports/ports, the government’s determined policy to ensure security was recognized. For example, the Antiterrorist Law (2003) was enacted in order to enhance air navigation security and other security measures. At the time of the ex-post evaluation, the current Medium-term National Development Plan (2010–2014) places importance on the necessity of constructing unified transportation facilities/equipment. The long-term plan for the aviation area emphasizes the enhancement of air navigation security. Furthermore, the Directorate General of Sea Communications puts the priority on a policy of cutting the number of accidents to zero. Accordingly, this project is relevant with its security measures, which is consistently the most important issue in Indonesia’s development policies.

(2) Relevance with the Development Needs of the Republic of Indonesia

Bombing terrorism and explosions that have occurred in various areas of Indonesia from the 2000’s had undermined Indonesia’s external trust and brought tremendous economic shocks. It is essential to take security measures to minimize the possibility of a recurrence of such incidents. Ensuring airport/port security is therefore important for development needs. The executing agencies have also reported that there is no duplication of cooperation activities between this project and the projects funded by other donors, therefore consistency is assured.

(3) Relevance with Japan’s ODA Policy

At the time of project planning, three priority areas were indicated as Japan’s ODA policy for the Republic of Indonesia: i) sustainable development through private initiatives; ii) democratic and equitable social development; and iii) peace and stability. The Japanese government decided to make the maximum efforts to help the Indonesian government’s independent efforts. In particular, “peace and stability” requires assistance to enhance counterterrorism measures. This project was therefore relevant with Japan’s ODA policy.

This project has been highly relevant with the country’s development plan, development needs, as well as Japan’s ODA policy; therefore its overall relevance is high.

2 Efficiency

(1) Project Outputs

Outputs from the Japan side were produced as planned, in terms of the number of equipment procured and the contents of technical assistance.

(2) Project Period

At the time of planning, the process from approving the equipment fabrication drawings to completing the technical assistance components was estimated to take 15 months. In fact, it was completed as planned (100% of the plan). It took 15 months to complete the technical assistance components in February 2006 after the contract for equipment procurement was signed in December 2004 and the equipment fabrication drawings were approved.

(3) Project Cost

The actual project cost was 672 million yen, while the planned cost was 747 million yen. The project cost was lower than planned (90% of the plan).

In light of the above, both the project cost and the project period were within the plan; therefore efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

As the indicators of project effectiveness, the detection rate of weapons, or improvements in screening accuracy, and information on the collection of dangerous items, were considered. As no test on the detection rate has been performed since the implementation of this project, there are no quantitative data. However, according to the executing agency and management companies, dangerous items are detected more frequently than before. In fact, the system that enables the inspection of all baggage as well as the highly accurate equipment has resulted in improvement of the detection of dangerous items compared with the past. It was confirmed during the site visit to the airport that many items prohibited on board aircraft such as scissors and bottled drinks were confiscated. In contrast, out of the 56 CCTV cameras installed at Tanjung Priok Port, only 17 are being utilized. As stated below in “Sustainability (4) Current Status of Operation & Maintenance,” it is difficult to restore them. Therefore, the impact of this project is judged to be lower

than initially estimated. However, the port management companies have already installed 16 wireless CCTV cameras using their own resources and are planning to install 41 more in the future. If these are installed, it is highly possible that the same level of impact will be achieved as a whole, as seen before the CCTV systems broke down.

(2) Qualitative Effects

As for the qualitative effects, it was anticipated that the security of passengers and baggage would be improved and the probability of the entry of terrorists and dangerous items carried on board would be reduced as a result of improved security at the airports and ports. At the time of ex-post evaluation, the specific number of cases of detection was not identified. However, the equipment has been utilized under the system to screen the baggage of all passengers. At Soekarno-Hatta Airport where the site inspection was conducted, it was confirmed that items detected were recorded and reported to the 2nd government-run aviation operations company (AP-II). Although the number of cases of the detection of dangerous items is not identified at the security check site of Tanjung Priok Port, a certain effect was observed in terms of the confiscation security procedures due to the cameras detecting two cases of vandalism and theft within their property, etc. In addition, at Tanjung Priok Port and Batam Airport, it produced good results including the detection of knives and ammunitions. Since the implementation of this project, no serious incident has occurred. It is therefore expected to produce outcomes including a deterrent effect on carrying dangerous items on board, etc.

(3) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

At the time of the basic design study, it was expected that tourism income and foreign currency income that declined due to the terrorist attacks would recover, which would contribute to the economic stability and the recovery of external credibility of the country. While the assessment of the recovery of external credibility is difficult, according to the executing agencies, an installation of the security equipment has boosted the confidence of the people associated with security. In relation to the economic aspects, the number of foreign visitors has steadily increased since 2006 (4.87 million people in 2006 ⇒ 7 million people in 2010). In addition, tourism revenues generally rose (4.4 billion dollars in 2006 ⇒ 7.6 billion dollars in 2010). Therefore, it is assumed that the tightening of security measures at the airports and ports through this project has to some extent contributed to stable economic growth for the country.

In light of the above, certain effects have been generated as a result of the implementation of this project, therefore effectiveness is moderate.

4 Sustainability

(1) Structural Aspects of Operation & Maintenance

While the executing agencies of this projects are the Directorate General of Civil Aviation (DGCA) and the Directorate General of Sea Transportation (DGST) of the Ministry of Transportation, operation and maintenance of airports was conducted by the 1st (2nd) government-run aviation operations company (AP-I and AP-II), and the 2nd (3rd) government-run port operations company (PELINDO-II and PELINDO-III). Regarding the Batam Port, the Batam Industrial Development Authority (BIDA) is conducting its own maintenance. These management companies have sections in charge of regular operation and maintenance. The equipment procured through this project is managed by these sections. AP and PELINDO are not under the supervision of the Ministry of Transportation, but of the Ministry of State Owned Enterprises.

(2) Technical Aspects of Operation & Maintenance

With respect to the technical skills for operation and maintenance, according to the executing agencies, airports and ports both have adequate equipment management skills. In fact, operating the equipment installed through this project does not require advanced technical skills. Any person who receives a certain amount of training should be able to operate the equipment. Concerning the training for the staff, AP conducts training about once a year regarding the operation and maintenance of equipment such as X-ray screening systems and walkthrough metal detectors. In addition, they provide three types of training from the basic level to the advanced level for security staff every year. These training sessions are planned and conducted by AP under the supervision of the Ministry of Transportation. However, the executing agencies recognize the need to further improve this training. While PELINDO conducts training about once a year, the staff basically receive on-the-job training for inspection skills.

In addition, technical cooperation such as the “Contingency Exercise on Airport Security (November 2006 – October 2007)” and “Project for Improvement of Aviation Safety Policy (July 2010 – July 2015)” in the field of airport management and the “Port Security Management Project (October 2006 – March 2012)” in the field of port management have been implemented. Through this technical cooperation, with the aim of improving the skills and capabilities for equipment utilization, operation and maintenance, as well as for human resource development, guidance was given to staff associated with airports and ports throughout Indonesia, including the airports and ports that were provided with equipment through this project.

(3) Financial Aspects of Operation & Maintenance

The DGCA and DGST, which are in charge of administering aviation and ports, do not allocate a budget specifically for the regular operation and maintenance of security equipment. The management companies such as AP and PELINDO set aside the budget for regular operation and maintenance costs. Partially because the executing agency (Ministry of Transportation) and the supervisory authority of the management companies (Ministry of State Owned Enterprises) are not the same, it was difficult to capture the financial information for all airports and ports within the limited time period of the survey. However, at Tanjung Priok Port where the site survey was conducted, PELINDO set aside 350 million Rupiah for CCTV and 800 million Rupiah for X-ray screening systems for the year. At Soekarno-Hatta Airport, although each terminal has an independent budget, AP allocated 800 million Rupiah (2012) for the operation and maintenance of security equipment for the Terminal 2 where international flights are serviced. The scale of the budget for operation and maintenance of both of the companies is reported to be satisfactory. However, the condition in rural areas differs from the airports and ports in the capital, and a budget shortfall has been pointed out. Therefore, it is considered crucial to ensure coordination between AP and PELINDO so that no airport or port faces a budget shortfall as a whole.

(4) Current Status of Operation & Maintenance

The equipment provided through this project was handled as the property of the Ministry of Transportation. However, in January 2012, the airport

security equipment was transferred to AP as their property. On the other hand, the port security equipment has not been transferred to PELINDO as their property. Partially because the property has been transferred for airports, AP is required to take responsibility for securing the budget as well as the operation and maintenance of the equipment from this point onward.

With regard to the status of the operation and maintenance of the equipment, according to the executing agencies, security measures have drastically improved at the airports compared with ten years ago. Currently, X-ray inspection is being thoroughly implemented. In the case of a failure of the equipment, it is immediately repaired. However, it was confirmed that explosives detectors are not utilized at most of the airports due to the high cost of expendables, including reagents. In addition, the cable of the currently installed CCTV systems was damaged at Tanjung Priok Port, the largest port in Indonesia, when road expansion construction was being carried out in 2009. Moreover, since concrete was laid on top of it, realistically, it is impossible to repair the system. Partially due to this, only 17 out of 56 cameras were operational at the time of ex-post evaluation, which remains at a low level. Moreover, even though the X-ray screening system broke down in 2011, it has remained inactive at the time of ex-post evaluation due to the delay in the procurement of spare parts, etc. As an emergency measure, inspectors were carrying out the inspections by utilizing handheld metal detectors. In addition, the repair of the X-ray screening systems at the port was outsourced to a specialized contractor.

The management of the operation and maintenance record varies. According to the executing agencies, while the maintenance record for aviation security equipment is always kept, the maintenance record for port security equipment is only partially kept.

According to the information obtained at the time of the field survey, concerning the equipment upgrading plan, AP-II is planning to undergo a major upgrade. For instance, AP-II is planning to purchase 73 higher-performing X-ray screening systems around August 2012 and to have 53 of them installed at the Soekarno-Hatta Airport. In doing so, the equipment provided through this project is planned to be transferred to the rural airports managed by AP-II. This equipment upgrade at the airport will be accomplished by purchasing new higher-accuracy model equipment. It is therefore considered reasonable that they have decided to introduce new model equipment at the largest airport in Indonesia and to relocate the old model equipment that was provided through this project to rural airports. As for the ports, the project to establish wireless CCTV systems is currently ongoing at Tanjung Priok Port. Once completed, the equipment provided through this project, including the 17 cameras currently in use, will no longer be required. This CCTV system upgrade will be accompanied by a major change from this project's analog type to a digital system. From the technical aspect, there is a restriction that the equipment provided through this project might not be usable. However, one of the reasons for this early upgrade is that the cable for the equipment provided through this project (CCTV systems) was damaged during road expansion construction work. Thus, prior to this construction, sufficient information sharing should have been conducted between the management company and the contractor.

In light of the above, it can be concluded that, although this project faced some problems concerning the equipment operation and maintenance at the ports, there were no other major issues, and the sustainability of the impact caused by this project is fair.