

## Simplified Ex-Post Evaluation for Technical Cooperation Project

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Project Name	The Project on Improvement of Maritime Education in the Republic of Turkey	February 2010 – December 2010

### I Project Outline

Country Name	Republic of Turkey			
Project Period	April 2000-March 2005			
Executing Agency	Maritime Faculty, Istanbul Technical University (ITUMF), Maritime Safety Training Center (MSTC)			
Cooperation Agency in Japan	Ministry of Land, Infrastructure, Transport and Tourism, Kobe University			
Total Cost	991 million yen			
Related Projects (if any)	The Project on Improvement of Maritime Education in the Republic of Turkey (Dispatch of an expert) (April 2005-October 2005)			
Overall Goal	Safe operation of Turkish merchant vessels is enhanced world-wide.			
Project Objective(s)	Maritime Faculty, Istanbul Technical University (ITUMF) establishes educational system to produce educated seafarers, and Maritime Safety Training Center (MSTC) produces refreshed and up-dated seafarers that meet international standards.			
Output[s]	(1) Education and training in the Deck Department of ITUMF is improved in accordance with international standards. (2) Education and training in the Engine Department of ITUMF is improved in accordance with international standards. (3) Research capacity concerning maritime safety management in ITUMF is enhanced.			
	Inputs (Japanese Side)		Inputs (Turkish Side)	
Experts	11 for Long term, 22 for Short term		Staff allocated	33
Equipments	470 million yen		Equipments	-
Local Cost	-		Local Cost	-
Trainees Received	19		Land etc provided	Construction of Simulation Center and MSTC Building
Others	-		Others	-

### II Result of the Evaluation

Summary of the evaluation
<p>As improvements in maritime education for the prevention of ship accidents are in great demand for the promotion of the maritime transportation sector in Turkey, relevance of this project is high.</p> <p>During the project period, the assignment of full-time counterpart personnel, the startup of the operation of the simulators, and accordingly, the commencement of technology transfer, were delayed. However, simulators and other equipment were provided and utilized in the Deck Department and Engine Department of the ITUMF so that it became possible to provide education and training that meets international standards. Research capacity concerning maritime safety management in the ITUMF has been enhanced. In the MSTC, refresher and update courses were improved and expanded in accordance with international standards. As a result, it can be said that the ITUMF/MSTC is contributing to producing seafarers in Turkey that meet international standards.</p> <p>The executive agency said that the budget for the maintenance and renewal of the ship-handling simulator is insufficient and computer engineers specialized in its maintenance are in short supply. However, the number of instructors is sufficient and they are still providing education and training utilizing the simulator and other equipment without any problem.</p> <p>In light of the above, this project is evaluated to be satisfactory.</p>

## 1 Relevance

### (1) Relevance with the Development Plan of Turkey

The Eighth Five-Year Development Plan (2001-2005) regards the enhancement of the maritime transportation sector as a priority task. Under the circumstances in which imports by Turkey's maritime transportation sector have been rapidly increasing and international demand for seafarers is high, qualified officials are in demand in the maritime sector. Maritime education is therefore also in high demand.

### (2) Relevance with the Development Needs of Turkey

In order to promote the maritime transportation sector with securing safe navigation, the education and training of seafarers for the prevention of ship accidents was regarded as important factor. However, most of Turkish seafarers had received insufficient maritime education. Therefore, it is recognized that improvement of maritime education in the ITUMF, which is the leading seafarer training institution in Turkey, is necessary to improve the country's maritime education.

### (3) Relevance with Japan's ODA Policy

One of Japan's priority areas for aids to Turkey is "human resources development for economic and social development: the enhancement of vocational (technical) education, the improvement and expansion of transport networks, and the introduction of advanced technologies" (Japan ODA Data Book 2005). Accordingly, the improvement of maritime education through this project is relevant to 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 relevance is high.

## 2 Effectiveness / Impact

### (1) Achievement of Project Outputs and Project Objective(s)

In the Deck Department of the ITUMF, the ship-handling simulator and other equipment were provided through this project, the education and training system was improved in accordance with international standards, and instructors for lectures utilizing the simulators were trained (Output [1]). In the Engine Department, the engine room simulator and other equipment were provided, the education and training system was improved in accordance with international standards, and instructors for lectures utilizing the simulators were trained (Output [2]). The number of research activities concerning maritime safety management increased from an annual average of 15.5 cases during FY2002-2006 up to 21.5 cases in the FY2007-2008 period. These research activities achieved satisfactory results in terms of their presentation at meetings inside and outside Turkey, and at international conventions. Accordingly research capacity was enhanced (Output [3]). In MSTC, refresher and update courses for existing seafarers was improved and expanded in accordance with international standards. According to the executive agency, the success rate of participants in refresher and update courses rose from 90-92% for participation to the previous courses up to 97-98% in FY2006 (both percentages are estimates) (Output [4]). Accordingly, this project has largely produced its outputs.

The education and training curriculum of ITUMF/MSTC was improved and expanded: 62 training courses were established utilizing the ship-handling simulator introduced through this project, and 24 training courses were established utilizing the engine room simulator. This contributed to producing competent seafarers who meet the international standards. According to the executive agency, the success rate for participants in ITUMF training courses for the maritime ocean going competency examination has stayed higher than for other maritime education institutions. Accordingly, the objective of producing educated seafarers in ITUMF was largely achieved.

### (2) Achievement of Overall Goal, Intended and Unintended Impacts

The number of cases of the detention of Turkish vessels among Port State Control cases has decreased. Turkey improved in terms of its flag state ranking, from the grey list to the white list. It can be said that the safe operation of Turkish merchant vessels has improved. However, it is possible to consider that factors other than the quality of Turkish seafarers, such as improvements in supervisory functions and the enhancement of vessel inspections by the Turkish maritime administration, have also contributed to safety improvements to a considerable degree. Therefore, the contribution of this project to the overall goal is thought to be limited.

This project has largely achieved its objectives, therefore its effectiveness is high.

## 3 Efficiency

### (1) Outputs

As mentioned under "Effectiveness / Impact" (1) above, this project produced the intended outputs.

As the number of full-time counterpart personnel assigned to the project was insufficient and completion of the construction of the Simulation Center was delayed, it took longer to start operation of the introduced simulators. As a result, dispatch of experts was required after the period of this project to transfer the technology for some activities. In addition, some of the provided equipment is not fully used for education and research due to difficulties in handling it.

### (2) Project Period of Cooperation

The achieved project period of cooperation was 60 months, virtually as planned (100% according to the plan). Due to a delay in personnel assignments in the Deck Department, short-term experts for technology transfer concerning education and training utilizing the ship-handling simulator were dispatched for six months after the termination of the project.

### (3) Project Cost of Cooperation

Project cost of the cooperation was 991 million yen (the planned cost was unknown).

In the light of the above, some of the elements of inputs were inappropriate for producing the outputs and achieving the project objectives, therefore, the efficiency of the project is fair.

## 4 Sustainability

(1) Related Policy towards the Project

The trend towards the increasing volume of maritime cargo handled in Turkey indicates the importance of the maritime transportation sector. Under such circumstances, the Ninth Development Plan (2007-2013) stipulates the improvement of navigation safety and the expansion of major ports.

(2) Institutional and Operational Aspects of the Executive Agency

Fulltime instructors are assigned to the operational management of the education and training courses. According to the executive agency, the number of instructors is insufficient. However, the shortage of instructors will be resolved since seven students currently enrolled in the doctoral course and seven students who are currently studying abroad are to be assigned as instructors.

(3) Technical Aspects of the Executive Agency

Although one computer engineer is currently responsible for both the operation and maintenance of the simulators, the executive agency stated that there is a lack of computer engineers who are specialized in maintenance. Although training for the trainers using the ship-handling simulator has not been provided, there are eight instructors and the agency state that it has enough instructors and has no problem in conducting the lectures and training activities utilizing the simulator.

(4) Financial Aspects of the Executive Agency

As detailed financial information was not obtained from the executive agency, the exact amount was not known, but the agency stated that the budget for the Maritime Faculty is secured. On the other hand, it also stated that the provided equipment requires upgrading, and it lacks the budget for the maintenance of the ship-handling simulator as well as for its upgrading.

(5) Continuity of Effectiveness and Impact

According to the executive agency, 32 education and training courses utilizing the simulators are being provided in FY2010 (24 courses in FY2006). The contents of some of the existing courses are also being updated. The simulators and other equipment provided are currently still being utilized in lectures and training.

Some problems have been observed in the financial aspects of the executive agency, therefore, sustainability of the project effects is fair.