

People's Republic of Bangladesh

FY2020 Ex-Post Evaluation Summary¹

of Japanese Grant Aid Project

“The Project for Improvement of Airport Safety and Security Systems”

1. Project Description

The demand for aviation in Bangladesh has expanded rapidly with the country's recent economic growth. While Bangladesh has international airports in three cities, including the capital Dhaka, and domestic airports in 7 other cities, the facilities necessary for the safe operation of aircraft have not been sufficiently developed. In particular, there was an urgent need to address the issue of blank radar coverage, the aging of aviation radio (beacon equipment) required for high-precision navigation, and the need for improved security inspections. Regarding the issue of radar coverage, the Bangladesh Flight Information Region² had a blank area in the radar surveillance remaining in the southern ocean airspace³, an area not covered by the radars installed at Dhaka International Airport. As such, there was an urgent need to develop a radar facility at Chattogram International Airport to secure the safe operation of aircraft. Regarding the aged aviation radio beacon equipment, frequent interference impaired the operation of the existing devices for providing aircraft position information at the Jessore and Saidpur airports, as the useful lives of the devices had expired. The urgency of updating these devices was high, as spare parts were also unavailable. Regarding the issue of security inspection, the existing procedures for baggage inspection at Dhaka International Airport were out of compliance with the international standards provided by the International Civil Aviation Organization (ICAO⁴). Therefore, it was necessary to install new X-ray baggage inspection systems for baggage check-in at the check-in counters.

Against this background, this project was implemented to secure safe aircraft navigation to destination airports and landing operations and provide measures against aircraft accidents and terrorism by installing aviation safety and security systems at four major airports in Bangladesh (Dhaka, Chattogram, Jessore, and Saidpur), and to thereby contribute to improved safety in the

¹ The ex-post evaluation of this project is published as a summary due to security reasons. Though the description of the summary reflects the original report written by the external evaluator, some parts which are unsuitable for publishing are left out or edited.

² An airspace where each country is responsible for providing information to aircraft (air traffic control) and conducting search and rescue activities in an emergency, in order to ensure safe and efficient navigation of aircraft. It was assigned to each member country by ICAO.

³ Major international air routes connecting Southeast Asia and Europe have been established.

⁴ It is a United Nations specialized agency established based on the International Civil Aviation Convention adopted in 1944. It was established for the purpose of cooperating with each country so that the International Civil Aviation Organization can develop safely and orderly, and that the international air transportation business can be operated soundly and economically based on the equal opportunity principle. (Source: Ministry of Foreign Affairs website https://www.mofa.go.jp/mofaj/gaiko/page22_000755.html)

country's aviation sector.

Grant Limit / Actual Grant Amount	2,402 million yen / 2,398 million yen
Exchange of Notes Date / Grant Agreement Date	March 2014 / March 2014
Executing Agency	Civil Aviation Authority of Bangladesh (CAAB)
Project Completion	May 2017
Target Areas	Dhaka International Airport, Chattogram International Airport, Jessore Airport, Saidpur Airport
Main Contractor	Sumitomo Corporation
Main Consultants	Oriental Consultants Global Co., Ltd. / Aviation Systems Consultants Co., Ltd. (JV)
Preparatory Survey	September 2013 – April 2014
Related Projects	<p>JICA:</p> <ul style="list-style-type: none"> • Chittagong Airport Development Project (FY1996) • Hazrat Shahjalal International Airport Expansion Project (Phase 1 FY2017, Phase 2 FY2020) • Project for Security Improvement of International Airports (FY2017 – FY2021) <p>British Government:</p> <ul style="list-style-type: none"> • Support for improving airport security at international airports through Redline Assured Security, a British private company (2016 – 2018)

2. Outline of the Evaluation Study

2.1 External Evaluator

Hideyuki Takagi, Ernst & Young ShinNihon LLC

2.2 Duration of Evaluation Study

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

Duration of the Study: October 2020 – January 2022

Duration of the Field Study: March – June 2021

2.3 Constraints during the Evaluation Study

Due to the spread of COVID-19 infection, the external evaluator was unable to carry out field

surveys in this ex-post evaluation. Therefore, the local assistant carried out the field surveys at the instruction of the external evaluator. The external evaluator conducted this evaluation by desk research based on the gathered information and the results of a beneficiary survey and site inspection carried out by the local assistant.

3. Conclusion

This project was implemented at four major airports in Bangladesh (Dhaka, Chattogram, Jessore, and Saidpur) with the objective of securing safe aircraft navigation to destination airports and landing operations and providing measures against aircraft accidents and terrorism by improving navigation assistance facilities and security equipment that needed to be either newly installed or renewed, and thereby contributing to improved safety in the country's aviation sector.

The relevance of the project is judged to be high because the implementation of the project has been sufficiently relevant with the development plan and development needs of Bangladesh, as well as with Japan's ODA policy. The outputs of this project, namely, airport surveillance radars, devices to provide aircraft position information, and airport security equipment, were almost as planned, whereas the specifications and numbers of installations were changed to some degree. Although the project cost was within the plan, the project period was significantly longer than plan due to delays in administrative procedures. Therefore, the efficiency of the project is judged to be fair. Regarding the project effects, the implementation of the project has achieved the project targets, including the expansion of radar coverage, a continuation of high-precision navigation, and compliance with international requirements on baggage inspection, and thereby has contributed to the improvement of the safety and reliability of aircraft operations and the response to the increases in air traffic. Therefore, the effectiveness and impact of the project are judged to be high. From the viewpoint of the sustainability of the project effects, some minor problems have been observed with technical aspects and with the operation and maintenance of the project facilities and equipment. Therefore, the sustainability of the project effects is judged to be fair.

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

4. Lessons Learned

Further safety improvement and contribution to impact by modifications of the plan to fit actual circumstances

After the commencement of this project, CAAB's security policy further strengthened inspection during the project bidding process by considering the recommendations from other countries. Based on this security policy change, CAAB has decided to gradually replace the conventional single-view machines with dual-view machines for its X-ray baggage inspection systems, and to thereby realize a higher inspection capability than is possible with the

conventional machines. The flexible modification of the plan to fit the situation has led the security system of Dhaka International Airport to a high level, and thereby improved the airport's reputation. The modification has also contributed to the continuation of European routes such as the London flights.