

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: Socialist Republic of Vietnam

Project: Terminal 2 Construction Project in Noi Bai International Airport (II)

Loan Agreement: March, 30, 2012

Loan Amount: 20,584 million Yen

Borrower: the Government of the Socialist Republic of Vietnam

2. Background and Necessity of the Project

(1) Current State and Issues of the Aeronautics Sector in Vietnam

Since Vietnam introduced its doi moi reform policy in 1986, the expansion of exports and foreign investment has been the driving force in moving the nation onto a course of economic growth. To maintain this progress, a transportation network must be provided that appropriately accommodates the swelling demand for transportation and rapid urbanization so as to ensure the smooth and safe passage of goods and people. Furthermore, as the air passenger transportation volume rapidly increases in big cities, especially in Hanoi (the capital) and Ho Chi Minh City, the creation and improvement of facilities to accommodate those passengers has become a looming issue in the aeronautics sector. (The number of international passengers had increased by some 20% each year for a decade until 2010.) The air passenger transportation volume has increased rapidly particularly at Noi Bai International Airport, the gateway to Hanoi; the existing passenger terminal designed to handle six million passengers per year passed its capacity (in 2010 with some 9.5 million people.) Increasing the passenger capacity that Noi Bai International Airport can handle, appropriately meeting the rapidly rising demand for air travel, and improving the convenience and safety of air travel are all pressing issues.

(2) Development Policies for the Aeronautics Sector in Vietnam and the Priority of the Project

The Government of Vietnam states in the Socio-Economic Development Strategy for 2011-2020 that it aims to become an industrialized and modern economy with the key priorities of “economy”, “society” and “environment”, and, for this purpose, formulate the foundation of high growth, better living standards, industrialization and modernization, and seek for development of “knowledge-based economy”, stabilization of politics, order and security, and better status in the global community. The strategy particularly cites the necessity of modernization of and investment in various sectors including the aeronautics sector. The Master Plan for the Aeronautics Sector for 2020-2030 also emphasizes the necessity of the development of Noi Bai International Airport.

(3) Japan and JICA's Policy and Operations in the Aeronautics Sector

Japan's Country Assistance Program for Vietnam formulated in July 2009 identifies "promotion of economic growth and strengthening of international competitiveness" as one of the country's priority areas, and views "urban development, network development for transportation and communications" as one of the specific pillars on which Japan will focus. In response to this, JICA has set assistance to transportation and urban development in the transportation network development program. This project is carried out as part of the program. To date, JICA has implemented various projects including Tan Son Nhat International Airport Terminal Construction (ODA loan approved in FY2001), and is currently implementing a project related to air traffic control, the Master Plan Study on the Development of the New CNS/ATM Systems, and a training program, Airport Development Planning for Considering Environment (Vietnamese trainees participated in 2010 and 2011), among other things. It is also implementing the Project for Support on Establishment of the Programs for Operation & Maintenance in Noi Bai International Airport (2012-2015) to improve the operation and maintenance capacity of Airports Corporation of Vietnam (ACV) and the operation of Terminal 2.

(4) Other Donors' Activity

No other assistance organization provides Vietnam's aeronautics sector with assistance.

(5) Necessity of the Project

The project will construct a new passenger terminal building for international travelers in Noi Bai International Airport to accommodate the rapidly increasing demand for air travel as well as improving the convenience and safety of air travel. The project is consistent with Japan and JICA's priority area, and the key priority stated in Vietnam's Master Plan for the Aeronautics Sector. Thus given the above, JICA's assistance for this project is highly necessary and relevant.

<h2>3. Project Description</h2>
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(1) Project Objective

The project will construct a second passenger terminal building for international travelers in Noi Bai International Airport, accommodating the rapidly increasing demand for air travel, and also promoting economic growth in Vietnam and strengthening the capacity for Vietnam to compete internationally.

(2) Project Site/Target Area

Socson, Hanoi City (22km in the north of the central part of Hanoi City)

(3) Project Components

- 1) Construction of the international terminal building and related facilities
 - (1) International terminal: total area: approx. 138,000m²
 - (2) Civil engineering work (elevated bridges, road, parking lots, etc.)
 - (3) Airport special facilities (baggage handling system, boarding bridge, security system, etc.)
 - (4) Sewerage treatment system
 - (5) Aviation fuel supply system
- 2) Consulting services (construction supervision, etc.)

(4) Estimated Project Cost (Loan Amount)

70,575 million Yen (Loan Amount: 20,584 million Yen)

(5) Schedule

March 2010 – November 2016 (81 months). The project will be completed when the facilities commences to provide services (April 2015).

(6) Project Implementation Structure

- 1) Borrower: the Government of the Socialist Republic of Vietnam
- 2) Executing Agency: Airports Corporation of Vietnam (ACV)
- 3) Operation and Maintenance System: ACV

(7) Environmental and Social Consideration/Poverty Reduction/Social Development

- 1) Environmental and Social Consideration
 - (1) Category: B
 - (2) Reason for Categorization: this project does not correspond to the large-scale airport sector specified in the “JBIC Guidelines for Confirmation of Environmental and Social Consideration” (established in April 2002) and will not have any significant adverse effect on the environment. The project does not include any of the characteristics specified in the Guidelines that tend to cause harmful impact nor regions that are easily affected.
 - (3) Environmental Permit: the detailed Environmental Impact Assessment (EIA) report was approved by Vietnam’s Ministry of Natural Resources and Environment (MONRE) in August 2009.
 - (4) Anti-Pollution Measures: during construction, measures will be taken for air quality, noise, etc. by monitoring the volume of polluted materials discharged from civil engineering equipment, sprinkling water and installing soundproof walls that are expected to meet the relevant domestic environmental standards.

- (5) Natural Environment: the project site is not located in or around sensitive areas such as a national park, and so adverse impact on the natural environment is assumed to be minimal.
- (6) Social Environment: this project requires acquisition of approximately 101 ha of land, which will be proceeded with in accordance with the relevant domestic procedures. The project requires no resettlement of residents.
- (7) Others / Monitoring: ACV will monitor the levels of air pollution, noise, vibration, water quality, etc.

2) Promotion of Poverty Reduction: none

3) Promotion of Social Development (e.g. gender perspective, measure for infectious diseases including HIV/AIDS, participatory development, consideration for the person with disability etc.):

The project will conduct HIV preventative programs for civil engineering workers during the construction period. The universal design will be applied for the terminal building in consideration of disabled and other vulnerable people.

(8) Collaboration with Other Donors:

Technical cooperation for operation and maintenance will be implemented.

(9) Other Important Issues:

None

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicators)

Indicator	Baseline (Actual Value in 2010)	Target (2017) 【Expected value 2 years after project completion】
Annual number of international airline passengers (1,000 people)	3,675	8,358
Annual number of departures and arrivals (times)	28,555	62,110

2) Internal Rate of Return

Based on the conditions indicated below, the economic internal rate of return (EIRR) of the project is 18.5% and the financial internal rate of return (FIRR) is 0.9%.

[EIRR]

Cost: project cost (excluding taxes) and operating and maintenance costs

Benefits: contribution to tourism, benefits arising from an increase in the numbers of passengers, and departures and arrivals of international airlines

Project life: 38 years

[FIRR]

Cost: project cost and operating and maintenance costs

Benefits: landing fees, charges for passenger boarding bridge, aircraft parking fees, airport charges, tenant fees, parking fees, etc.

Project life: 38 years

(2) Qualitative Effects

Promotion of economic growth and strengthening of international competitiveness

5. External Factors and Risk Control

None

6. Lessons Learned from Past Projects

(1) Evaluations of similar projects undertaken in the past:

The ex-post evaluations of past similar projects in the airport sector have been carefully examined. The lessons learnt are that the timing of project implementation and the project size should be determined after factors affecting demand forecasts are carefully analyzed, and that it is important to establish an appropriate operation and maintenance system and secure the project budget.

(2) Lessons for this project:

The project size has been determined after careful F/S and D/D. An appropriate operation and maintenance system will be established through implementation of technical cooperation and the establishment of a service preparatory committee.

7. Plan for Future Evaluation

(1) Indicators to be Used

- 1) Annual number of international airline passengers (1,000 people)
- 2) Annual number of departures and arrivals (times)
- 3) EIRR (%)
- 4) FIRR (%)

(2) Timing

Two years after project completion