Ex-Ante Evaluation

1. Name of the Project

Country: The Republic of the Union of Myanmar

Project: Infrastructure Development Project in Thilawa Area Phase II

Loan Agreement: September 5, 2014

Loan Amount: 4,613 million yen

Borrower: The Government of the Republic of the Union of Myanmar

2. Background and Necessity of the Project

(1) Current State and Issues of Special Economic Zone (hereafter, "SEZ") (current state) in Myanmar

After the inauguration of the Thein Sein administration in March 2011, reforms toward democratization and a market economy have shown rapid progress in Myanmar. The Myanmar government focuses on inviting direct investment from foreign countries and improving citizens' income through economic growth, with its policy of inviting foreign companies and developing SEZs in Thilawa, Dawei, and Kyaukpyu. Of these SEZs, the Thilawa SEZ offers such advantages as the use of abundant labor power, existing industries, and ports in Greater Yangon. The Myanmar government announced its priority development of the Thilawa SEZ, and wants to invite Japanese companies possessing high technical skills and experience in creating employment in SEZs located in Asian nations. In order to achieve these goals, however, infrastructure in the SEZ and surrounding areas must be urgently renovated and developed. In particular, the narrow roads and deteriorating pavement that raise safety concerns must be improved, in order to accommodate the dramatic increase in traffic expected between Yangon City and the Thilawa SEZ.

(2) Development policies for the SEZ in Myanmar and Priority of the Project

As mentioned above, the Myanmar government focuses on inviting direct investment from abroad, and promotes legal system improvements, such as revision of the Foreign Investment Law and SEZ Law. (Foreign Investment Law and SEZ Law has been revised.) In December 2012, the Myanmar government and the Japanese government signed the Minute of Cooperation to develop the Thilawa Special Economic Zone and agreed on said development as a cooperation project involving both governments. The Infrastructure Development Project in Thilawa Area Phase II (hereafter, "the project") aims to renovate infrastructure in the Thilawa SEZ and surrounding areas.

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

Japan's Country Assistance Program for Myanmar (April 2012) suggests a policy of "Assistance to development of infrastructure and systems necessary for sustainable economic growth" as one of Myanmar's priority area. The project contributes to sustainable economic growth by promoting the invitation of direct investment from abroad through the renovation of infrastructure relevant to the Thilawa SEZ, and is consistent with this policy. In June 2013, "The Infrastructure Development Project in Thilawa Area Phase I" (Japanese ODA loan) was provided to renovate port and electric power facilities in the Thilawa area.

(4) Other Donors' Activity

So far, no other donors have supported development of the Thilawa SEZ. South Korea is conducting a pre-F/S concerning a project for building bridges on the Yangon River, in line with road development around Yangon City.

(5) Necessity of the Project

As stated above, the project is consistent with Myanmar's developmental tasks and development policies, as well as with Japan's and JICA's aid policies. Accordingly, JICA's assistance for the Project is highly necessary and relevant.

3. Project Description

(1) Project Objective

The objective of the project is to promote the inflow of foreign investment in the Thilawa area by improving and widening the access road between Yangon and the Thilawa area and achieving a smooth traffic flow, thereby contributing to job creation and the economic development of Myanmar.

- (2) Project Site/Target Area: Thilawa area and Thanlyin area in Yangon region
- (3) Project Components
 - Expansion of road width and renovation (8.7 km), 2) underground installation of distribution lines and communication cables, 3) improvement of other relevant equipment and facilities (e.g. traffic lights, drainage paths), 4) training, 5) consulting service (e.g. detailed design, tender assistance, construction supervision)
- (4) Estimated Project Cost (Loan Amount): 5,180 million yen (Loan Amount: 4,613 million Yen)
- (5) Schedule: September 2014 to July 2019 (59 months). Project completion is defined as the completion of construction (scheduled for July 2018).
- (6) Project Implementation Structure
 - 1) Borrower: The Government of the Republic of the Union of Myanmar
 - 2) Guarantor: None
 - 3) Executing Agency: Ministry of Construction, Public Works
 - 4) Operation and Maintenance System: Ministry of Construction, Public Works
- (7) Environmental and Social Consideration/Poverty Reduction/Social Development
 - 1) Environmental and Social Consideration
 - (i) Category: B
 - (ii) Reason for categorization: The project does not fall under the large-scale road sector as

listed in the "Japan International Cooperation Agency Guidelines for Environmental and Social Consideration" (issued in April 2010, hereafter, "JICA Guidelines"), and is not expected to have major adverse effects on the environment. The project also does not have any of the characteristics that are likely to lead to adverse effects, and is not in sensitive areas specified by the JICA Guidelines.

- (iii) Environmental Permit: Myanmar's domestic laws do not require the preparation of an environmental impact assessment (EIA) report concerning the project.
- (iv) Anti-pollution Measures: Air pollution, water contamination, noise, and oscillation are expected during construction work. Such measures as the use of water sprinklers, leachate treatment, and limited work hours will be adopted to mitigate pollution problems. After completion of construction work, the increased traffic volume will cause air pollution, as well as more noise and oscillation. To minimize the impact, such measures against traffic congestion as controlling parked vehicles will be adopted.
- (v) Natural environment: As the project area is not situated in or around a national park or other sensitive areas, adverse effect on the natural environment is expected to be minimal.
- (vi) Social environment: Because the Ministry of Construction owns the land concerned, the project does not involve land acquisition or relocation of residents. For 12 venders who operate businesses in the Project area, compensation and support will be provided in line with the abbreviated re action plan which was prepared based on the JICA Guidelines and reflected requirement from these venders. No specific objections were raised in discussions with these venders.
- (vii) Other/monitoring: The construction company will monitor such items as air quality, water quality, noise, oscillation, waste, and odor during construction. The executing agency will monitor air quality, noise and oscillation after completion of construction.
- 2) Promotion of Poverty Reduction: None
- Promotion of Social Development (e.g. gender perspective, measures for infectious diseases including HIV/AIDS, participatory development, considerations for persons with disabilities): None
- (8) Collaboration with Other Donors: N/A
- (9) Other Important Issues: N/A

4. Targeted Outcomes

- (1) Quantitative Effects
 - 1) Performance Indicators (Operation and Effect Indicator)

Indicator	Baseline (Actual Value in 2013)	Target (2020) [Expected value 2 years after project completion]
Daily traffic volume (weekdays, calculated as passenger cars) (pcu/day)	22,880	24,484
Average speed (weekdays) (km/h)	26.2	49.7

 Internal Rate of Return: Based on the condition below, the economic internal rate of return (EIRR) of the project is calculated to be 15.50%. The financial internal rate of return (FIRR) has not been calculated.

Cost: Project cost (tax excluded), cost of operation and maintenance Benefits: Shortened driving time, reduced driving expenses

Project life: 15 years

(2) Qualitative Effects: Expanded direct investment in the Thilawa area, growth of Greater Yangon, generation of employment

5. External Factors and Risk Control

Delays in development of the industrial zone and housing land in the Thilawa SEZ

6. Lessons Learned from Past Projects

- (1) Evaluation of Similar Projects: The ex-post evaluation such as the "The Project for the Study on Strengthening Competitiveness and Development of Sihanoukville Port" in Cambodia taught us the importance of proper "geographical conditions, infrastructural improvement, investment requirements, the level of rent, and attraction of enterprises" for SEZ development.
- (2) Lessons Learned for the Project: The projects for infrastructure development necessary for the SEZ have been considered and formulated collecting information and requirement from private companies. And to improve the environment for investment, such as investment requirements, infrastructural improvement, and the attraction of enterprises, dispatching experts is considered to enhance the capacity of the Myanmar government.

7. Plan for Future Evaluation

- Indicators to be Used: Daily traffic volume (weekdays, calculated as passenger cars) (pcu/day), average speed (weekdays) (km/h), internal rate of return (%)
- (2) Timing

Two years after completion of the project