Ex-ante Evaluation

1. Name of the Project
Country: The Socialist Republic of Vietnam
Project: Higher Education Development Support Project on ICT
(Loan Agreement: March 31, 2006; Loan Amount: 5,422 million yen; Borrower: The Government of the Socialist Republic of Vietnam)

2. Necessity and Relevance of JBIC’s Assistance
Since the introduction of the “doi moi” (renovation) policy in Vietnam, a standardized and diverse educational system has been established at all levels from preschool to graduate school. However, only 15% proceed to higher education, a lower figure than in neighboring countries. Vietnam’s Education Development Strategy Plan (EDSP) 2001-2010 ranks development of education as a prioritized sector and in the higher education sector, the plan aims to develop high-quality human resources and implement research and development that will meet the real needs of society, by keeping pace with the progress in science and technology. Meanwhile, a problem in higher education pointed out in the EDSP is that many graduates have not acquired technological and problem-solving skills to meet the real requirements of society because the curricula overemphasize the mastery of theory and knowledge. Moreover, because universities and research institutions lack funds and equipment, practical training and experiments are conducted using older equipment and systems than are being used by industry, and so it is difficult to conduct educational and research activities that meet the needs of industry.

In response to the above-mentioned issues in the higher education sector and the IT sector, the Vietnamese government has requested assistance from the Japanese government/JBIC for a project to promote improvement in the quality of higher education, using the IT sector as the pilot sector. The IT sector is an appropriate model sector for undertaking resolution of the above-mentioned problems in the higher education sector because the rate of progress in the IT sector is faster than in other industrial sectors and it is a sector where there is a particular demand for education to meet the real needs of society in close collaboration with the industrial world.

In JBIC’s current Medium-Term Strategy for Overseas Economic Cooperation Operations, emphasis is placed on the priority area of “assistance for human resources development,” and assistance is to be extended for higher education in collaboration with universities, etc., so that Japan’s experience in this sector can be utilized.

Therefore, JBIC’s assistance is highly necessary and relevant.

3. Project Objectives
The objective of this project is to develop outstanding human resources to fill positions at educational institutions in the IT field and in IT industry, by implementing a model educational program in universities that play a leading role in Vietnam’s educational and research activities in the IT sector, and through that, to upgrade the level of education in the IT sector, and thereby contribute to the strengthening of Vietnam’s industrial competitiveness through advancement of IT technology.

4. Project Description
(1) Target Area
City of Hanoi

(2) Project Outline
Equipment and materials as well as services that are necessary for the implementation of the project will be provided as follows at Hanoi University of Technology.
(a) Implementation of Japanese language education
(b) Sending of students to study overseas
(c) Procurement of educational equipment and materials
(d) Consulting services (overseas study assistance, tendering assistance for equipment, operation supervision, etc.)

(3) Total Project Cost/Loan Amount
6,408 million yen (Yen Loan Amount: 5,422 million yen)

(4) Schedule
April 2006-August 2014 (101 months)

(5) Implementation Structure
(a) Borrower: The Government of the Socialist Republic of Vietnam
(b) Executing Agency: Ministry of Education and Training, Hanoi University of Technology
(c) Operation and Maintenance System: Ministry of Education and Training, Hanoi University of Technology

(6) Environmental and Social Consideration
(a) Environmental Effects/Land Acquisition and Resettlement
   (i) Category: C
   (ii) Reason for Categorization
        This project is classified as Category C because it is not in a sector nor does it have characteristics likely to exert impact, nor is it in a sensitive region, and so adverse impact on the environment is considered minimal, under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established April 2002).
(b) Promotion of Poverty Reduction
    None
(c) Promotion of Social Development (e.g. Gender Perspective)
    None

(7) Other Important Issues
Assistance will be provided for the preparation of the model program (curriculum proposals, etc.) to be implemented at the Hanoi University of Technology. In the new program, together with emphasizing Japanese language education, the curriculum is expected to conform to the IT Skill
Standards (ITSS) prepared by Japan’s Ministry of Economy, Trade, and Industry, and human resources will be trained who can mainly develop the software for Japanese environments that is required by the Japanese IT software industry.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline (2005)</th>
<th>Target (2016, 2 years after completion)</th>
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<tbody>
<tr>
<td>Graduates of the programs (persons)</td>
<td>-</td>
<td>432</td>
</tr>
<tr>
<td>Percentage achieving the respective ITSS levels 2 years after graduation (%)</td>
<td>-</td>
<td>Level 2 80</td>
</tr>
<tr>
<td>Percentage of graduates passing the respective levels of Japanese language competency (%)</td>
<td>-</td>
<td>Level 2 80 Level 3 10</td>
</tr>
<tr>
<td>Percentage of instructors in program who hold doctoral degrees (%)</td>
<td>55</td>
<td>65</td>
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</tbody>
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6. External Risk Factors

Recession in Japan’s IT software industry

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

In ex-post evaluations of similar projects in the human resources development sector in the past, it has been learned that it is necessary to study flexible schemes particularly in order to prevent the gradual diminishment of effects due to age in facilities that are sensitive to the impact of technological innovation and to reflect the latest needs of the end users.

Based on this lesson learned, it is planned in this project to receive feedback at the time of interim evaluation from industry on the educational program, including equipment and materials used, and to implement renewal of the equipment and materials, including the server network.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Graduates of the programs (persons)
(b) Percentage achieving the respective ITSS levels 2 years after graduation (%)
(c) Percentage of graduates passing the respective levels of Japanese language competency (%)
(d) Percentage of instructors in program who hold doctoral degrees (%)

(2) Timing of Next Evaluation

After project completion