付属資料

１．ミニッツ
２．評価グリッド和文
３．日本側関係者へのアンケート結果要約
４．海外大学関係者へのアンケート結果要約
５．日本人教員派遣実績
６．共同研究実績
７．研究論文実績
８．機材供与実績
９．本邦短期訪問実績
10．域内短期訪問実績
11．フィールドワイズセミナー実績
12．ワークショップ実績
13．IT 関連機材供与実績
14．プロジェクト準備期間（2003 年以前）の活動
15．卒業生名簿

1．ミニッツ

MINUTES OF MEETING
BETWEEN
THE JAPANESE MID-TERM EVALUATION TEAM
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THAILAND
ON
THE JAPANESE TECHNICAL COOPERATION
FOR
THE ASEAN UNIVERSITY NETWORK/SOUTHEAST ASIA ENGINEERING EDUCATION DEVELOPMENT NETWORK

The Japanese Mid-term Evaluation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Shuji Ono conducted an evaluation study from November 16th to December 9th, 2005, for the purpose of the joint mid-term evaluation of the project for the ASEAN University Network/Southeast Asia Engineering Education Development Network Project (hereinafter referred to as "the Project").

During their stay in Thailand, the Team had a series of discussion with the Thai authorities concerned, jointly evaluated the achievements of the Project, and exchanged views of the Project.

As a result of the study and discussions, both sides agreed to report to their respective Governments the matters referred to in the document attached hereto.

Bangkok, December 9th, 2005

Mr. Shuji Ono
Leader
Japanese Mid-Term Evaluation Team,
Japan International Cooperation Agency,
Japan

Prof. Dr. Pavich Tongroach
Secretary-General
Commission on Higher Education,
Thailand
Chairman of AUN Board of Trustees

Assoc. Prof. Krisada Visavateeranon
Executive Director
ASEAN University Network / Southeast Asia Engineering Education Development Network Secretariat
Thailand

CONTENTS

List of Abbreviations

1. Introduction
   1.1. Background
   1.2 Objectives of the Evaluation
   1.3. Major Activities of the Team
   1.4. Evaluators
   1.5. Method of Evaluation

2. Project Achievement
   2.1. Inputs
   2.2. Outputs
   2.3. Project Purpose
   2.4. Overall Goal

3. Evaluation by Five Criteria
   3.1. Relevance
   3.2. Effectiveness
   3.3. Efficiency
   3.4. Impact
   3.5. Sustainability

4. Conclusion of the Evaluation

5. Issues to be Discussed

ANNEXES

ANNEX 1. Project Design Matrix (PDM)
ANNEX 2. Evaluation Grid
ANNEX 3. Project Scheme
ANNEX 4. List of Japanese Experts and Thai Personnel for the Secretariat
ANNEX 5. List of Master and PhD Students
ANNEX 6. List of Master Graduates, Research Projects and Academic Seminars Supported by ASEAN Foundation
ANNEX 7. Cost-sharing: by Acutual Implementation and Commitment from Member Institutions
ANNEX 8. Schedule of Mid-term Evaluation
ANNEX 9. List of Major Interviewees by the Team

List of Information/Data Collected
- Japanese Professors' Visits to Member Institutions
- Collaborative Research and Thesis Research Support
- Special Equipment for Collaborative Research
- Short-term Visits of Professors of Member Institutions (to Japan and Other Member Institutions)
- Field-wise Seminars
- IT Enhanced Courseware
- Promotional Trips, Workshops, and Conferences

Lo Krisada

Pasuk Tayeng

List of Abbreviations and Acronyms

General Terms

ASEAN	Association of Southeast Asian Nations
AUN	ASEAN University Network
GDP	Gross Domestic Product
HEDS	Higher Education Development Support
HI(s)	Host Institution(s) (definition: Institution that hosts a designated engineering field)
IT	Information Technology
JICA	Japanese International Cooperation Agency
JSU(s), JSUC	Japanese Supporting University(ies), Japanese Supporting University Consortium
MI(s)	Member Institution(s)
Non-HI(s)	Non-Host Institution(s) (definition: Institution that does not host a designated engineering field)
ODA	Official Development Assistance
PDM	Project Design Matrix
SC	Steering Committee
SEED-Net	Southeast Asia Engineering Education Development Network
SI(s)	Sending Institution(s) (definition: Institution that sends students to study under graduate degree program)

Member Institutions under AUN/SEED-Net

BUU	Burapha University
CU	Chulalongkorn University
DLSU	De La Salle University
HCMUT	Ho Chi Minh City University of Technology
HUT	Hanoi University of Technology
ITB(BRU)	Institut Teknologi Brunei
ITB(INA)	Institut Teknologi Bandung
ITC	Institute of Technology of Cambodia
KMITL	King Mongkut's Institute of Technology Ladkrabang
NTU	Nanyang Technological University
NUOL	National University of Laos
NUS	National University of Singapore
UBD	Universiti Brunei Darussalam
UGM	Gadjah Mada University
UM	University of Malaya
UP	University of the Philippines
USM	Universiti Sains Malaysia
UY	University of Yangon
YTU	Yangon Technological University

S.C. Kusada

ATTACHED DOCUMENT

1. Introduction

1.1. Background

The concept of SEED-Net, or Southeast Asia Engineering Education Development Network, has evolved from the initiative of the former Prime Minister of Japan Mr. Ryutaro Hashimoto in 1997, to enhance economic sustainability in ASEAN region through human resources development. This initiative was later firmly incorporated into "Obuchi Plan", which was announced by the then Prime Minister Mr. Keizo Obuchi when the "ASEAN Plus 3 Summit" was held in Manila in November 1999. This plan entailed support for a network of human resources development in higher education in ASEAN countries in the area of engineering, whereby Japan intends to finance this undertaking through Japan's bilateral technical cooperation program schemes and, in addition, the Japan-ASEAN Solidarity Fund.

To materialize this undertaking, the relevant authorities of ASEAN countries and Japan envisaged formation of an engineering institutions network ASEAN-wide, which will promote upgrading of higher engineering education through active collaboration among the member institutions and Japanese universities. This is in line with the principles underlying the already existing ASEAN University Network (AUN), which aims at promoting human resources development through collaboration of leading universities and institutions in the ASEAN region with a view to ultimately establishing ASEAN University based on this expanded network.

In April 2001, the basis of the project concept "Cooperative Framework" was agreed by all parties concerned, "The ASEAN University Network / Southeast Asia Engineering Education Development Network" (AUN/SEED-Net) was inaugurated as an autonomous sub-network under the auspices of the AUN. AUN/SEED-Net is composed of 19 member institutions supported by Japanese Supporting University Consortium (JSUC), consisting of 11 Japanese universities. The Secretariat of AUN/SEED-Net was decided to be located at the Faculty of Engineering, Chulalongkorn University. In June, 2002, the strategy paper was completed based on the workshop on "Formulating AUN/SEED-Net Strategy and Action Plan of the Member Institutions" in order to map out a strategic plan for implementation. Subsequently, in March 2003, the five-year Project "The ASEAN University Network / Southeast Asia Engineering Education Development Network" started officially after Record of Discussion (R/D) was signed between Thailand and JICA.

At this time, with approximately two years and four months remaining in the Project period, a team has been dispatched by JICA to evaluate the achievements at the mid-term of the Project.

1.2. Objectives of the Evaluation

1) To grasp the inputs of all parties and summarize the achievements of the Project in accordance with the Project Design Matrix (PDM) and from the viewpoint of five evaluation criteria (explained in "1.5 Method of Evaluation" in this document).
2) To decide whether or not the initial plan needs to be revised or reformulated.
3) To present the issues to reinforce the project implementation in line with project purpose on the future perspective of the Project

S.O. Kuwada

1.3. Major Activities of the Team (refer to ANNEX 8 for the schedule. refer to ANNEX 9 for major interviewees)

Date		Major Activities
Nov.15	Tue.	Visit and interview to NUOL (Team 3*)
Nov.16	Wed.	Meeting with JICA Experts (Team 1)
Nov.17	Thur.	Visit and Interview to KMITL (Team 1* & 3)
Nov.18	Fri.	Meeting with JICA Experts and Thai personnel (Team 1 & 3)
Nov.19	Sat.	Preparation for evaluation summary
Nov.20	Sun.	(move to next meeting place)
Nov.21	Mon.	Visit and interview to UM, Malaysian Ministry of Higher Education, and JICA Malaysia Office (Team 1)
Nov.22	Tue.	Visit and interview to USM (Team 1)
Nov.23	Wed.	(move to next meeting place)
Nov.24	Thur.	Visit and interview to DLSU and JICA Philippines Office (Team 1), to UGM (Team 2), and to JICA Singapore Office (Team 3)
Nov.25	Fri.	Visit and interview to UP and Philippines Commission on Higher Education (Team 1), to JICA Indonesia Office and Indonesian Ministry of Education (Team 2), and to NTU and NUS (Team 3)
Nov.26	Sat.	Preparation for evaluation summary
Nov.27	Sun.	Preparation for evaluation summary
Nov.28	Mon.	Meeting with JICA Experts, Thai Personnel(Team1) Visit and interview to ITB (INA), (Team 2)
Nov.29	Tue.	Meeting with JICA Experts and Thai personnel (Team1) Visit and interview to HUT (Team 3)
Nov.30	Wed.	Visit & interview to HCMUT (Team 1 & 3) Visit and interview to ITC and Ministry of Education of Cambodia (Team 2)
Dec. 1	Thur.	Meeting with JICA Experts and Thai personnel
Dec. 2	Fri.	Visit and interview to CU (Team 2)
Dec. 3	Sat.	Preparation of Minutes of Meetings
Dec. 4	Sun.	Preparation of Minutes of Meetings
Dec. 5	Mon.	Meeting with JICA Experts and Thai personnel
Dec. 6	Tue.	Meeting with AUN, and TICA (Team leader)
Dec. 7	Wed.	Meeting with Joint Coordinating Committee (JCC) members on the Results of the Evaluation and Minutes of Meetings (Whole team)
Dec. 8	Thur.	Revision of Minutes of Meetings
Dec. 9	Fri.	Signing ceremony of the Minutes of Meetings Report to Japanese Embassy and JICA Thailand Office

Note::* Team 1= Ms. Mitsue Mishima, Consultant, Team 2=Mr. Takashi Matsumoto, JICA Headquarter officer,
Team 3= Mr. Kazuya Suzuki, JICA Thailand Officer

1.4. Evaluators

The mid-term evaluation was jointly carried out by the both Japanese and Thai evaluators.

1.4.1 The Japanese Side

Team Leader:
Mr. Shuji Ono, Group Director, Group II (Technical and Higher Education), Human Development Department, Japan International Cooperation Agency

Evaluation Planning 1:
Mr. Kazuya Suzuki, Assistant Resident Representative, Thailand Office, Japan International Cooperation Agency

Evaluation Planning 2:
Mr. Takashi Matsumoto, Staff, Technical and Higher Education Team, Group II, Human Development Department, Japan International Cooperation Agency

Evaluation Analysis:
Ms. Mitsue Mishima, Consultant, Overseas Project Management Consultants, Ltd.

1.4.2 The Thai side

Prof. Dr. Pavich Tongroach, Secretary-General for Commission on Higher Education, and Chairman of AUN Board of Trustees

Assoc. Prof. Krisada Visavateeranon, Executive Director, Secretariat of the ASEAN University Network / Southeast Asia Engineering Education Development Network

Ms. Suthanone Fungtammasan, Development Cooperation Programme Evaluation Unit, Thailand International Development Cooperation Agency (TICA), Ministry of Foreign Affairs

1.5. Method of Evaluation

The original Project Design Matrix (PDM, **referer to ANNEX 1**), which was attached to the Record of Discussions (R/D) signed between JICA and Ministry of University Affairs of Thailand in March 2003, is utilized as a basis of the evaluation together with the Activity Plan in the Cooperative Framework document.

However, the original PDM of the Project and the Activity Plan, which were created at the initial stage of the project, have been thereafter further developed and revised as a result of the discussion and approved by the Steering Committee (SC) and Joint Coordination Committee (JCC). Thus, some of the indicators mentioned in the original PDM to serve as the basis for the activities to achieve outputs, project purpose and overall goal may not be necessarily relevant at present. Therefore, it should be noted that the evaluation was conducted with this condition.

Besides the aforementioned documents, some important documents such as annual reports of the project and SC reports, which show the achievement of the Project activities, are utilized for evaluation purpose.

The team sent questionnaires to all Ministries of Education of member countries, all the 19 member institutions, and the Secretariat to collect information, their views and opinions on the project. Moreover, results of collected questionnaires, which were sent to all the 19 MIs, Ministries of Education of member countries, and the Secretariat, and/or interview to concerned parties, are also utilized as evidence for evaluation. To collect more in-depth data in addition to the questionnaire result, discussions and interviews were conducted at MIs. To cover 14 MIs in eight countries, three sub-study teams were formed and visited respective countries.

Achievement of the Project has been evaluated by the following five criteria through discussion between both sides.

a. Relevance

Relevance of the Project plan is reviewed by the validity of the Project purpose and the overall goal in connection with the development policy of the Governments of member countries and the needs of the beneficiaries as well as the logical consistency of the Project plan.

b. Effectiveness

Effectiveness is assessed by evaluating to what extent the Project has achieved its purpose and clarifying the relationship between the purpose and outputs.

c. Efficiency

Efficiency of the Project implementation is analyzed with an emphasis on the relationships between outputs and inputs in terms of timing, quality and quantity.

d. Impact

Impacts of the Project are assessed by either positive or negative influences caused by the Project.

e. Sustainability

Sustainability of the Project is assessed in managerial, financial and organizational aspects by examining the extent to which the achievement of the Project will be sustained and expanded after the completion of the Project.

2. Project Achievement

2.1. Inputs

2.1.1. Inputs from Japanese side

In total, the Japanese side has allocated and appropriated necessary budget for the project activities and management as shown in the following table.

Unit: Thousand yen

Japanese Fiscal Year	JFY2003	JFY2004	JFY 2005(Plan)
Total Cost for Project Implementation	**158,437**	**379,614**	**516,996**

Below are the details regarding main inputs provided by JICA (all the numbers below are as of November 2005).

(1) Dispatch of experts and assignment of personnel for management of the Secretariat

To date, in total eleven (11) experts/personnel **(refer to ANNEX 4 for details)** were dispatched and assigned as follows:

- One (1) Chief Advisor
- One (1) Academic Advisor
- Three (3) Project Coordinators
- Six (6) Program Officers

(2)Dispatch of technical experts (i.e., Japanese Professors) for the Project implementation

In total, 199 persons/times were dispatched for attending field-wise seminars and/or supervising collaborative research.

(3) Provision of Master's and PhD scholarships

Master's degree scholarships were provided to 175 persons and PhD scholarships to 54 persons (PhD in Japan:22 PhD Sandwich:32) in total, from JFY 2003 to 2005 (as of November, 2005. **Refer to ANNEX 5 for details).**

(4) Provision of research support fund

Financial assistance was provided for 18 thesis research and 125 collaborative research projects in total from JFY 2003 to 2005, (as of November, 2005).

(5)Provision of equipment

Equipment for collaborative research of the Project was procured and installed in each Host Institution.

S. C. Kiwada

2.1.2. Inputs from the Thai Side

The following inputs have been provided by the Thai side.

(1) Assignment of personnel

AUN/SEED-Net Secretariat Executive Director, Assistant Executive Director, and two (2) secretaries were assigned.

(2) Provision of project office

Office space is provided at the Faculty of Engineering, Chulalongkorn University.

(3) Allocation of recurrent costs for project operation

The Thai side has allocated budget for utility and administrative costs, of the Project, including personnel costs. The budget allocated for each year is approximately Thai Baht 643,000.

2.1.3. Inputs from the Japan-ASEAN Solidarity Fund

In total, US$ 316,073.56 was provided for 9 master scholarships, 6 research projects, and 5 academic seminars (from the year 2001 to 2004, including the preparation period of the Project. **(refer to ANNEX 6 for details)**.

2.1.4. Inputs from Member Institutions

In case students cannot complete their study within the period and extend their study period, some of the Host Institutions (HIs) have waived 50-100% of tuition fee during extension period. Support to AUN/SEED-Net students has been provided in other forms as well by the six HIs. **(refer to ANNEX 7 for details)**.

2.2. Outputs

To summarize, the achievement of each output by activities of the Project is discussed as follows (refer to ANNEX 2 for details on each indicator according to the PDM)

Output1. "Faculty qualifications are upgraded through acquisition of graduate degrees"

Provision of scholarships by the Project has increased the number of academic staff at Master degree level. As for the PhD students, the majority of them have not graduated yet at present, however, it is expected to increase the number of PhD holders soon. There is one PhD student who graduated ahead of schedule in the three year planned period as of November 2005. These graduates are mainly from the Sending Institutions in Indonesia, Laos, Myanmar, Vietnam, and Cambodia.

Total graduates of the project are 70 persons with Master's degree and one person with PhD so far. At present, approximately 70 % of Master's degree holders are already working as faculty staff. Among the remaining graduates who are not currently working as academic staff, many are continuing their study at PhD level and are expected to join their institutions as academic staff. The Secretariat puts emphasis on being currently academic staff (or future academic staff) as important criteria for selection; therefore, it can be expected that many students will work as academic staff after their graduation.

Output 2. "Host graduate programs are enhanced"

At this moment, it is observed that graduate programs at HIs are enhanced by the Project in different

ways depending on the situation of each HI. According to reports by HIs and interview to them, the majority of host institutions recognize that their programs have been enhanced through the project both in terms of education and research. Some HIs indicated that there is an increase of number of research projects, conference papers and proceedings, courses or supplementary classes for international students, and a proposal for establishment of a new PhD course has also been made as a result of the project. It has been also mentioned by some HIs that establishment of the international course itself, which led to a better status as an educational institution, has been initiated by the project.

Output 3. "Joint activities and human linkage among the Member Institutions are strengthened"

This output was partly achieved and expected to be achieved by strengthening the activities conducted by the Project and also efforts by the MIs.

Workshops and seminars were held by the MIs 17times in JFY 2003 and 19 times in JFY 2004 and these activities provided opportunities for faculty members and students of MIs to get to know researchers from other countries in the same field. All Host Institutions except Singaporean universities conducted promotional trips supported by the Project. They visited other member institutions in order to introduce their graduate courses, recruit new students, and explore the possibility of cooperation on research activities since 2003.

Regarding all these activities, there is room to examine any means to enhance more involvement of non-Host institutions in organizing seminars and collaborative research as some MIs have suggested that more active exchange activities among MIs are necessary.

Output 4. "Information-dissemination system, activity management system and communication network are established."

This output was partly achieved and is expected to be further strengthened by defining specific outputs of each item and supplementing some activities to achieve the output, if necessary.

In terms of information dissemination and communication network, the project website was renewed in March 2005. From then, to the end of October, the total access number to current website was 6,064 (except for June, when there was a system error) Out of 19 member institutions, 9 member institutions have their own website with a link or page introducing the AUN/SEED-Net activities. Newsletters started to be issued quarterly in year 2005, to report the activities of AUN/SEED-Net. In total, 500 copies were issued and distributed. The number of mailing list members is 243 for distribution of newsletter of electronic version. 3,000 copies of brochures were printed and distributed to related organizations.

For activity management, organization of the Secretariat and an implementation scheme were established **(refer to ANNEX 3)**. A Steering Committee was formed comprising of representatives of MIs and met semi-annually to monitor the project. Monitoring visits to each HIs are regularly conducted once a year by the Secretariat, and also on other occasions such as orientation and field-wise seminars, the Secretariat sometimes monitors the progress of students and takes any measures to provide support, if necessary. The Project prepares guidelines for management and implementation of the activities which are reviewed every year.

2.3. Project Purpose

"Educational and research capacities of the Member Institutions are improved through the active exchange of resources among them and the collaborative relationship with Japanese Supporting University Consortium."

Project purpose is expected to be achieved through the activities conducted by the Project and efforts by MIs.

S. O. Kisada

For the evaluation purpose, since the definition of project purpose differs from one member institution to another, it should be presented based on the situation of each MI.

"Improvement of educational and research capacity" for the HIs is generally attained in terms of changed coursework style and increased number of research activities, research schemes, and better research environment with equipment provision. Some SIs have benefited by an increased number of academic staff with higher degrees. This shows a dramatic contribution to the improvement of educational/research capacity.

Singaporean and Brunei institutions have different positions from the others, due to the status of non-ODA target countries. However, their participation is also considered as critical as members of ASEAN countries. In case of Singaporean institutions, they have also taken a role of co-contributors in terms of financial support.

2.4. Overall Goal

"Economic sustainability is enhanced through engineering human resources development so as to reinvigorate the industrial sector of ASEAN countries."

As the Project has just started operation on a regular basis, it is too early to measure the achievement of the overall goal; however, the Project is obviously promoting engineering human resources development.

Although the direction of the Project overall goal is agreed by MIs according to the questionnaire survey, there is a gap in logics between project purpose and overall goal. Human resource development in the engineering field at higher education level was promoted by the Project. However, in order to reinvigorate the industrial sector and to enhance economic sustainability, a lot more inputs and longer time is required to achieve this goal. It is necessary to review the overall goal to be more closely linked to project purpose in logics and to be possible to achieve within several years after project completion.

3. Evaluation by Five Criteria

3.1. Relevance

The project purpose is relevant to the needs of each MI. All MIs agreed that improvement of educational and research capacity through exchange with other MIs and Japanese Universities is relevant to their needs. All of them evaluate that the exchange of academic staff and cooperative activities through the Project can improve their educational and research capacities.

According to the strategy paper, ASEAN countries needed to enhance the quality of human resources in the engineering field at higher education level, so as to contribute to local educational and research development capability. This is generally still consistent with the development policy of ASEAN countries although degree of emphasis on this point is different in each country. The overall goal, "Economic sustainability is enhanced through engineering human resources development so as to reinvigorate the industrial sector," indicates the direction of each country's needs; however, this can be achieved in the long distant future, with more inputs besides the Project.

In terms of the current Japanese ODA policy, the Project is in line with an approach to support human resource development, including receiving exchange students and research cooperation, which can contribute to industrial development. Asia, including ASEAN countries, is a priority target area of Japanese ODA since Japan has a close relationship with them economically. Therefore, strengthening the relationship with ASEAN countries and rectifying the disparity within the region is promoted by utilizing the resources of ODA. The project scheme entails this concept. Institutions that can offer international post graduate programs are designated to be "Host Institution" by receiving students from

other members; while other institutions with high need of faculty upgradation can send their staff to the graduate programs with support by JSUC.

In terms of relevance to project design as a means, there is another issue which should be highlighted. In the Master's program, students studying in another ASEAN country can learn knowledge or technology in a similar setting to their home country, which is very much useful for the students. This view has been expressed by many current students, graduates, and faculty members. Also, some of the students were pointing out that this project is contributing much to unity in the ASEAN region.

3.2. Effectiveness

It is difficult to discuss the effectiveness of the project due to the lack of tangible and specific target indicators, and it is also too early to examine the overall result at this stage. Some evidence, however, indicates effective implementation of the Project. Outputs in terms of faculty qualification improvement and Host graduate program enhancement are being achieved, and strengthening the linkage among MIs is being promoted, while more efforts can also be made. The extent of achievement of the project purpose is discussed below.

(1) Educational capacity development

In general, those faculty staff who joined the project for qualification upgrade successfully completed the program, and as a result, SIs will have more qualified staff through the project. The scholarships have been provided for the faculty staff as planned, and most students in Master degree course successfully graduated within two years; thus, the effectiveness of the Project is obvious for those non-host and sending institutions in Laos, Vietnam, Cambodia and Myanmar. For example, some institutions are expected to increase the percentage of Master degree holders among their academic staff. Some SIs still are in need of a large number of Master's and PhD degree holders; therefore, the Project has contributed much in this sense.

In the case of HIs, due to the increase of AUN/SEED-Net students, the Project contributed to an increased number of research activities and improvement of their course works in different ways, depending on the situation in respective universities. Some universities did not have an international course for foreigners before the project was conducted; thus, they started teaching in English language in their course for the first time. Inspired by the AUN/SEED-Net project, some HIs have opened or will open new courses such as a new PhD course in Environmental Engineering at UP and an Infrastructure Program in Civil Engineering at CU for international students.

(2) Research Capacity Development

For HIs, research capacity is developed through the collaborative research projects. Through this scheme, the Project supported research at different HIs in terms of financial and academic inputs. HIs are conducting increased number of research activities with a better research environment along with participation by Japanese supporting universities or Member institutions. Some universities emphasized that they increased the number of presented papers at conferences or seminars, both in international and national journals.

Enhancement of research capacity at SIs allows those faculty staff who are ex-AUN/SEED-Net students to utilize their knowledge when they give lectures and conduct research at their universities. Also, some professors at SIs who participated in collaborative research activities may also have some benefits. However, generally speaking, available research funds and equipment are limited at SIs; therefore, it is observed that they may face the difficulty to develop their research activities after returning to their home country. This issue should be examined at the time of final evaluation or ideally

at the time of post evaluation when there will be more graduates.

(3) Strengthening the collaborative relationships among MIs and JSUC

The relationships among MIs and JSUC have been initiated or strengthened through collaborative research schemes, field-wise seminars, and other occasional academic seminars, which include short-term visits of MIs to Japan and to other MIs and Japanese professor dispatch program to MIs. Some universities already had relationships with some other MIs or Japanese universities before the Project has been implemented. Even in this case, MIs pointed that the Project further developed the existing relationships. Among MIs or JSUs, there are already some cases where bilateral agreements were signed owing to the Project, as an opportunity to create a network with other universities in the region. This is a sub-effect by the Project, that the existing relationship has also been enhanced and sustained more firmly.

Relations among MIs can be enhanced further as some MIs pointed out. Considering the fact that participation of academic staff of non-Host Institutions is relatively limited in the form of participation in field-wise activities compared to HIs at the moment, it may be worth considering providing more chances for the SIs to take part in various activities.

A main promoting factor in the above three points is all participants' initiatives and commitment from each member institutions. The more commitment each MI and JSUs have, the more strengthened capacity development and relationships will be achieved, and vice versa. While quality, expertise, and devotion of Japanese professors are appreciated by MIs, some MIs suggested having more collaboration with JSUs other than the field coordinating university or even with non-JSUC university.

3.3. Efficiency

(1) Overall

In comparison of current outputs and inputs from the Japanese, Thai, and member institution side, the inputs were well utilized for the activities to yield expected outputs in general. Activities were implemented as planned by utilizing the inputs of the resources. Collaborative research programs had several outputs in their activities involving AUN/SEED-Net students, advisors at HIs, co-advisors at MIs (if any), Japanese professors, and also other students or lecturers in each HI, with support of funds and equipment. Contribution of activities to outputs was verified in most items. Some activities such as IT enhanced courseware were prepared and implemented in a transition period to the current Project scheme, These activities in the preparation period were completed; however, in view of the relationship among MIs, many other activities such as field seminars and collaborative research started after year 2003.

(2) Inputs from JAPAN-ASEAN Solidarity Fund

There was financial input from the JAPAN-ASEAN Solidarity Fund to the Project. It was utilized from the preparation period until year 2004. It was utilized for scholarships, research projects, and academic seminars. The project did not use all the budget prepared by the fund due to some changes in the plan at MIs sides.

(3) Personnel at Secretariat

Japanese experts to support the Secretariat were appropriately allocated in general. Given the volume of inputs and activities of the Project, the number of Japanese experts and length of stay appear to be minimal. In order to fill up the needed human resources for the management of the Secretariat, the Project also employed Thai personnel as program officers. In addition, there are some support from the

S. O. Kiinada

government of Thailand. The Secretariat, with all of these human resources supported by JICA and Thailand, has performed its role effectively.

(4) Various Programs

The number and timing of Japanese Professor dispatches to support collaborative research are relatively limited to the needs of MIs. However, current operation is conducted to find the best way to minimize the difficulty of compromising the schedule of their work at universities. Many concerned parties pointed out the problem of time-consuming process of equipment procurement, which somewhat affected the schedule of research activities.

In respect of scholarships for the Masters program, most of them graduated within two years, until now, with extension of period in some cases. HIs provided necessary support for students to conduct their study and research smoothly. Some students who have difficulties in communication in English attended some extra courses for language. HIs have a critical role for the students to complete their study smoothly. In the case of PhD students, they are currently studying in the middle of the study period. This sandwich program is a new program which involves rather complex procedures among respective governments and institutions; therefore, the project has to pay attention to the successful implementation of the program.

(5) Inputs from Thai and MIs sides

As for the inputs from Thai and MIs sides, it will be necessary to reconsider the needs for further inputs from the Thai and member institutions sides, depending on the future vision of the network. Some HIs have already addressed their commitment to extend support to the network and implemented them partly.

3.4. Impact

At this moment, it is too early to assess the overall impact of the project since it requires more time and inputs beyond the Project framework to achieve the overall goal, "Economic sustainability is enhanced" through engineering human resource development. If the project purpose is achieved, this achievement will promote human resource development in the engineering field. Contribution to reinvigoration of the industrial sector is still limited, although some cases may have some indirect effects.

The majority of MIs agreed that strengthening the ties among ASEAN countries through the network and expansion of the relationship is a visible impact of the Project. Many AUN/SEED-Net students and some HIs had contact with other MIs for the first time, or some HIs increased their contact with other academic staff in ASEAN countries. After the commencement of the project, MOUs have been signed between a JSU and an MI, or between MIs based on the network created. Some of the JSUs even opened their branch offices within the campus of MIs after participating in the project. Moreover, one of the PhD graduates in Japan has been employed at the Japanese university as a research associate for one year after completion of study. Some of the MIs have been conducting a regional seminar on their own after the project supported the first seminar. Cultural exchanges in the regions are providing a new awareness for them. Some HIs had relatively new experience of receiving a number of international students, especially from ASEAN countries. In this case, it was reported that the international academic atmosphere has stimulated local students and brought a positive impact.

Another kind of impact is that the project is seen as a successful model to upgrade qualifications of academic staff. The scholarships given to Thai students by the Commission on Higher Education of Thailand (CHE) are an example. Since Thai students are not eligible for AUN/SEED-Net project

S.O Krisada

scholarships in Thailand, CHE is providing financial support for similar study opportunities at HIs in Thailand. It has been also mentioned by AUN that the project is serving as a good model for this kind. This type of impact might be observed within the region; therefore, it should be examined at the time of final evaluation.

3.5. Sustainability

On the one hand, through the expansion and function of the AUN/SEED-Net, human relationships within MIs and JSUs can be sustained in the future. On the other hand, for sustainability of the network itself, some critical issues have to be considered in terms of the following points.

(1) Strategic aspect

Strategy of the Project was formed in line with the current situation of ASEAN countries, and this is the strength of the Project. The original concept had more emphasis on links with Industry; later this emphasis shifted to enhancing the quality of academic staff in the region and improving the capacity of HIs to support them. This emphasis should be shared among MIs for better understanding. There are a number of professors and students involved in AUN/SEED-Net; therefore, sometimes this strategy is not always well shared by all the parties concerned. Another point noted is that the strategy of the network does not clarify the perspective in the future. For example, it is not still clear who can play the role of main organizer of the network after the project period. In 2004, a position paper of AUN/SEED-Net was approved at the 8th Steering Committee as a policy for sustainability. To put this concept into practice, the strategy or policy paper should be carefully reviewed, shared, and understood well by all participants, and proper actions should be taken.

Another issue will be alumni organization. AUN/SEED-Net work will produce approximately 400 graduates at the end of the project. Support for alumni organization and members can enhance sustainability, thus it is important to include this in the future perspective.

(2) Organizational and management aspect

Current organization and management to support the AUN/SEED-Net is highly dependent on Japanese financial and personnel resources. It is necessary to share more portions of work or financial resources with MIs or other governmental entities for the network to be more independent and sustainable. At the other end, organizational scale should be set up in a more manageable manner depending on the form of future network.

The Project scheme of having one Host Institution in charge of one field as a regional hub worked functionally for reducing the managerial burden and complex situations and increasing visible outcomes. On the other hand, reviewing the result of the implementation, it should reconsider shortcomings so that the network can be always functional.

(3) Financial aspect

At this moment, the Project has a weakness in financial viability. Since this is a lifeline of scholarships in particular, it will affect most by this component. To support the network activities financially, it is required to find other financial sources. Financial sources for scholarships, seminars, and research support funds can be identified in different ways in the existing schemes each MI or country has. At the same time, it might be necessary to find a way of implementation in a more cost effective manner in each activity.

4. Conclusion of the Evaluation

During the first two and a half years, the Project has evolved its schemes and activities toward the project purpose. This has been totally a challenge in implementing a new type of network development among universities in ASEAN countries with support of Japanese universities. Through some tentative activities at the outset of the Project, AUN/SEED-Net elaborated the scheme to be well-focused by a field-wise and host / sending institutions approach. This scheme has multiple effects of human resource development, which are cost effective and local knowledge oriented, and at the same time tightening the relationships within MIs in the ASEAN countries and universities in Japan. This is a network with a unique characteristic in its scheme, which cannot be comparable to other networks in international society. After a lot of efforts, the project activities, consisting of enormous number of activities, are very well and efficiently implemented today. The human resources and human network among universities created in the project should also be adapted in other JICA projects, too.

It is also remarkable that this project has proved that South-South cooperation in the area of higher education is working well in the region. This project is the first of its kind, and has worked as a model for future similar efforts, and will broaden scopes for further future human resource development efforts.

At this moment, the Project activities have just reached full scale operation in terms of quantity, and started producing some achievements, coupled with further bi-products of relationships beyond the network. In this sense, AUN/SEED-Net works as a catalyst and leverage of strengthening linkage among universities in ASEAN countries and Japan. Further effects of the network will be revealed several years later. Accordingly, sustainability of the network in the future is very critical to assure further project effects and impacts. It is therefore imperative for the Project to prepare for setting up some structure to sustain the network after the project period.

5. Issues to be Discussed

Based on the findings of the evaluation of the Project, the Thai and Japanese sides raised the following issues to be discussed at the Steering Committee Meeting among Member Institutions in January 2006, for the remaining project period.

5.1 Development of the project strategy

Though the project has documents such as the strategy paper to frame the overall policy and future visions of the project, efforts can be made to understand more about the ground needs of the MIs. For example, the project inputs should be planned and implemented more based on the human resource development needs at each institution. Strategies in each of the nine engineering field should also be developed to make each field more active and sustainable.

Once the strategy in the project becomes clearer, current PDM can be modified accordingly. Some unnecessary or unclearly defined indicators in the PDM should be rectified. Setting indicators separately based on the needs of each institution is another way to have more tangible target for final evaluation.

5.2 Redefining the matching among member institutions

According to the comments given under 3.2 effectiveness, the Project may examine the current matching of Host fields, Host Institutions, and Japanese Supporting Universities through monitoring activities in each field.

5.3 Focused area in the project

It is expected that the number of faculty staff with a Master's degree will be increased over years; while those with PhD degrees will be still in need. Thus, the Project may reconsider the numbers of Master's and PhD scholarships to respond to the needs of Member Institutions that may vary from one to another. Furthermore, the amount and scope of support on research-related activities can also be adjusted accordingly. One possibility is to focus on the need to increase the number of PhD holders and to improve the research capability at Member Institutions.

5.4 Further participation of Non-HIs

Participation of Non-HIs in the activities should be further promoted; their opportunities of direct participation are relatively limited in the Collaborative Research Program. Collaborative research is an important occasion for all the Non-HIs to enhance their research capacities and to strengthen network with other researchers and institutions. Therefore, it may be considered to make it a condition to involve Non-HIs in all the Collaborative Research Programs for more participation by Non-HIs. Moreover,,priorities may be given to those Non-HIs in terms of other programs as well.

5.5 Strengthening of alumni network

Active network of AUN/SEED-Net students can be a key issue for further development of the human resources and the network created in the project. Measures should be taken by graduates, MIs and the Project to make use of the fruits of the Project so far.

5.6 Cost-sharing by Member Institutions/countries and other funding sources

Financial sources are very critical matters for the sustainability of the Project. The Project encourages cost sharing by Member Institutions and/or Countries. Although some proposed measures in the Position Paper on Sustainability of the Project have already been conducted by some institutions, more efforts should be made for further implementation and commitment by other members can also be sought.

In terms of involvement from the Governments, it has been so far rather limited although JICA has signed the Minutes of Meetings with almost all governmental entities in charge of higher education. Formal commitment to support the Network including financial contribution from each country may need to be made at this stage so that the Project can operate smoothly after March 2008.

It the same time, in order to ensure financial viability for scholarships, activity to find new funding sources outside the network should also be actively pursued.

5.7 Sustainability of Graduate Programs in HIs

Since the sustainability of the Network relies much on the sustainability of the Graduate Programs in HIs, it is vital for each Host Institution to upgrade and maintain its program upto the international standard so that they can attract other international students for self-reliance purpose. It is thus necessary for Host Institutions to plan their strategy ahead and gear their activities towards that aim.

5.8 Degree Program duration

The PhD scholarships awarded in this project should be supported until the end of their study period and necessary measures should be taken to realize this. Supporting those programs is indispensable in order to achieve project purpose. Requests have been made in interviews and discussions during the visits to each institution.

5.9 Project monitoring toward final evaluation

The Project regularly conducts monitoring activities to measure progress of the activities. However, monitoring of the project in larger scale is somewhat lacking. Monitoring activity based on indicators mentioned in PDM can be enhanced and this exercise will not only be useful for improving the current activities but also required for final evaluation of the project. In addition, since the Project covers many countries and a lot of activities, it is better if the database currently available can be further developed and utilized as monitoring indicators. For qualitative evaluation, the improvement of education and research capacity should also be more clearly defined in accordance with the situation of each case of MIs.

5.10 More publicity of the network

The information dissemination within the member institutions is promoted by website and newsletters. However, advertising the Project to the wider society was not emphasized specifically. Public relation activities aimed at international organizations, engineering academic society and the general public can be more active through media such as video, newspaper, TV.

ANNEX 1

AUN/SEED-Net Project Design Matrix for the Whole Period (including the Preparatory Period)

Narrative Summary	Indicators	Means of verification	Important Assumptions
Overall Goal Economic sustainability is enhanced through engineering human resources development as to reinvigorate the industrial sector of ASEAN countries.	➢ Functioning of sustainable human resources development system in higher engineering education ➢ Number of the academics acquiring higher degrees with in the ASEAN region	➢ Record of AUN ➢ Record of the SEED-Net Secretariat ➢ Record of the member Institutions	➢ Each ASEAN country's government maintains a policy and support to strengthen engineering higher education.
Project Objective Educational and research capacities of the Member Institutions are improved through the active exchange of resources among them and the collaborative relationship with Japanese Supporting University Consortium.	➢ Number and percentage of the academic staff with postgraduate qualifications (master's and Ph.D. degrees) ➢ The number of scholarships for graduate study received from each source ➢ The contributions from the member institutions and ASEAN countries ➢ The number of research publications and presentations ➢ The number of patented research outputs ➢ The amounts of research income and commissioned research works	➢ Record of the SEED-Net Secretariat ➢ Record of each Member Institution	➢ Economy of each ASEAN country is steadily growing. ➢ Private sector grows at the same or faster rate to make employment opportunity available ➢ Labor market is large enough to absorb graduates of the Member Institutions. ➢ The Member Institutions can find other resources than SEED-Net.
Output 1. Faculty qualifications are upgraded through acquisition of graduate degrees	➢ The number of applicants for scholarship to the SEED-Net ➢ The number of applications for admission to the host graduate program ➢ The number of the academic staffs acquired higher degrees (master's and Ph.D. degrees) ➢ The percentage of the academic staffs acquired their degrees with in the ASEAN region.	➢ Record of the SEED-Net Secretariat ➢ Record of each Member Institution	➢ Academic staff remains in the academic profession of Member Institutions after earning higher degrees. ➢ Salary level of academic staff is comparable and competitive to the private sector's
2. Host graduate programs are enhanced	➢ The number of research publications and presentations with graduate students through thesis research to journals and conference. ➢ Number of citations of papers above ➢ The number and the percentage of graduate students in the host graduate program ➢ The number of joint supervision of graduate students among member institutions and Japanese Universities. ➢ The number of laboratory equipment added or updated.	➢ Record of the SEED-Net Secretariat ➢ Record of each Member Institution ➢ Journals with papers written by the Member Institutions ➢ Conference proceedings ➢ Evaluation on academic staff by themselves and students	

3. Joint activities and human linkage among the Member Institutions are strengthened	➢ Number and quality of IT-enhanced teaching materials developed. ➢ Number of institutions utilizing the teaching materials developed above. ➢ The number of joint research publications and presentations with other member institutions to Journals and conferences ➢ The number of updated lecture notes and laboratory manuals ➢ The number of updated curricula ➢ The number of patented research outputs supported by the project. ➢ The number of trips by faculty members between two countries through the project. ➢ The number of days the faculty members stayed in other countries through the project. ➢ The number of training program hosted by the MI. ➢ The number of post doctoral fellows hosted by the MI. ➢ The number of seminars/workshops	➢ Record of and evaluation by IT-Enhanced Engineering Courseware Committee (ITEEC) ➢ Record of the SEED-Net Secretariat ➢ Record of each Member Institution ➢ Archive of the SEED-Net Secretariat ➢ Evaluation by academic staff who teach through IT-enhanced courseware ➢ Evaluation by students who learn from IT-enhanced courseware Evaluation by participants in seminars/workshops	
4. Information-dissemination system, activity management system and communication network are established.	➢ The number of access to the Web-site ➢ The number of the record of academics in the database ➢ The number of applications for the various SEED-Net support programs ➢ The number of posted research findings of the Member Institutions ➢ The number of inquires from outside ➢ The number of cooperation agreements among the member institutions and Japanese universities. ➢ Degree of utilization of the SEED-Net web-site (bulletin board system, mailing lists, etc.) ➢ The number of Japanese Professors dispatch through the recommendations of JSUC.	➢ Evaluation by academic staff of the Member Institutions ➢ Record of the SEED-Net web-site ➢ Record of JICA HDQ	
Activities 1-1 Establishment of quota and management system 1-2. Implementation of acquisition of Master's degrees with in the Member Institutions. 1-3 Implementation of Ph.D. acquisition support program in the Japanese Supporting Universities.	**Input (JICA Side)** **a) Long-term Experts** 1) Chief Advisor (1 person), 2) Academic Advisor (1 person), 3) Project Coordinator (3 persons) cooperation period. **b) Short-term Experts** Short-term experts, mainly professors from Japanese universities, will be dispatched to the Member Institutions on a necessary and occasional basis. The total number of short-term experts		➢ All the Member Institutions are collaborative and supportive to each other in conducting activities. ➢ Japan's ODA is not drastically reduced.

2-1. Provision of thesis research support funds to the advisors of host graduate programs who accept those students from the Member Institutions. 2-2. Special lectures, research seminars and workshops through the dispatch of Japanese professors and prominent scholars from other member institutions. 2-3 Joint research supervision and researches through the dispatch of Japanese professors and prominent scholars from other member institutions.	**c) Support to Research Activities** 1) Funding for research projects (150 projects / 5 years) 2) Provision of research equipment (30 sets / 5 years) **d) Support to Degree program and short-term training within the member institutions** 1) Acquisition of higher degrees (250 persons / 5 years) 2) Short-term training (150 – 200 persons / 5 years) **e) Support to participating conferences for presentations** (120 - 150 persons / 5 years) **f) Holding Seminars, conferences and workshops** (100 – 150 events) **g) Support to study in Japan** 1) Ph.D. program in Japan (40 persons / 5 years) 2) Short-term study in Japan (125 persons / 5 years) **h) Support to administrative and operational costs of the SEED-Net Secretariat**	**Preconditions** All the Member Institutions are highly motivated to utilize a variety of the schemes of SEED-Net.
3-1. Conduct model lectures, seminars and workshops where such activities invite the academics of other member institutions. 3-2. Conduct short-term training programs in the member institutions and Japanese Univ. 3-3. Support joint research by faculty members from more than one Member Institutions. 3-4. Developing IT-enhanced courseware. 3-5. Holding academic seminars, workshops and conferences.	**Inputs (Member Institutions)** a) Office space and partial operating costs of the SEED-Net Secretariat (Chulalomgkorn Univ.) b) Scholarships for 7 students/annum from the member institutions (Singapore National University) c) Appropriate cost sharing to implement the projects. d) Member Institutions will endeavor to implement the following measures where appropriate: 1) To subsidize tuition and other fees for selected disciplines and specific number of scholars. 2) To facilitate subsidy for accommodation for scholars/faculty fellows. 3) To facilitate the exchange of library materials and publications electronically or traditional means. 4) To use the its resources to complement the SEED-Net fund. 5) To authorize eminent administrators or faculty members to serve in the SEED-Net secretariat or the Steering Committee when nominated / selected.	
4-1. Establish organization structure and management system of the AUN/SEED-Net. 4-2. Establishment of information dissemination system and communication network 4-3. Establish the efficient communication system between the member Institution and Japanese Supporting Universities.	**Inputs (Japan – ASEAN Solidarity Fund)** a) Support to Research Activities (6 cases / 5 years) b) Support to graduate study within the region (11 cases / 5 years) c) Support to Conferences (5 cases / 5 years)	

Evaluation Grid (Progress and Process)

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
Progress of Project	Has the Japanese side been providing the inputs as planned?	(Data & Information) · Plan and actual number of experts dispatched · Plan and actual equipments granted · Budget and actual costs allocated to the Project · Comments by the parties concerned (Source) · Annual reports · Strategy paper · Reports from steering committee and JCC · Secretariat of AUN/SEED-Net	**Inputs described in the original PDM were found to be categorized by personnel, equipment or facilities, and financial cost as follows (NOTE: Support for activities has changed in the very beginning of the Project. The planned and actual activities are referred in the section of "Implementation Process of the project"):** **1.Dispatch of Japanese Experts** **a. Japanese Experts Dispatched for Project Management** The following experts were planned to be dispatched to the Secretariat of SEED-NET: One (1) Chief Advisor, one (1) Academic Advisor, and three (3) Project Coordinators in the PDM. As of December 2005, eleven (11) experts were dispatched for the Project to cover the above positions. Being continued from the preparation period, as long-term experts, one (1) Chief Advisor was assigned until August 2003 and one (1) Academic Advisor was assigned until September 2004. Since then to the date (as of November 2005), one (1) Chief Advisor and one (1) Academic Advisor were dispatched. In addition, three (3) Project Coordinators have been stationed at the Secretariat. Six (6) Thai program officers were assigned to support for the work (refer to ANNEX 4 in details). **b. Japanese Professors Dispatched for Project Implementation** The Japanese side planned to dispatch short-term experts on a necessary and occasional basis. The total number of short-term experts will be about 200 - 250 within 5 years of the cooperation period. According to the JICA Head quarter's record, the cumulative total number of Japanese professors dispatched is **199 persons / times for attending field-wise seminars and/or supervising collaborative research,** as of the end of November 2005. ● **60 persons / times** to visit to MIs for CR related activities. ● **139 persons / times** to attend field-wise seminars and other matters. **2. Equipments Granted** There was no specific plan in the original PDM or the strategy paper. Eventually, special equipments, which amounted US$ 458,324 in total by the end of Japanese Fiscal Year 2004, were granted to the Member Institutions and have been fully utilized. (NOTE* During preparation period, the IT equipments, which amounted THB 2,813,308 in total, were granted to 13 Member Institutions, including the current 7 host and 6 sending institutions) **3. Project Cost** The total amount of project cost, including costs for seminars, research and small amount equipment for research, provided by the Japanese side is 533,814 thousand yen, by the end of Japanese fiscal year 2004. (Note: During the implementation of the Project, IT enhanced courseware development was allocated with the total amount US$48,845, and 14 persons from 13 institutions including current 8 host institutions and 5 sending

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
			institutions.)
	Have the ASEAN countries been providing the inputs as planned?	(Data & Information) · Plan and actual personnel assigned by the Thai side · Plan and actual facilities · Budget and actual costs allocated to the Project · Comments by the parties concerned (Source) · Annual reports · Strategy paper · Reports from steering committee and JCC · Secretariat of AUN/SEED-Net · Member Institutions · Ministry of Education in ASEAN countries	**Inputs from the Thailand and MIs** **1. Personnel Assigned for project management** According to R/D between JICA and the Ministry of University Affairs in Thailand, the following personnels were planned to be assigned: · **Chairperson of the Joint Coordinating Committee (JCC)**: the Permanent Secretary for University Affairs and the Chairman of the AUN Board of Trustees from Thailand · **Project Manager**: Executive Director of AUN/SEED-Net Secretariat · **Project managers for the Member Institutions**: (1) Presidents or authorized representatives of the MIs in Thailand, (2) Deans or authorized representatives and academic staffs in Faculty of Engineering at the MIs in Thailand · **Administrative Personnel**: (1) Program Officers, (2) Secretaries, (3) other necessary staffs As of the end of November 2005, one (1) chairperson of JCC was assigned as planned. With the financial support for the personnel cost by the Japanese side, one (1) project manager, three (3) program officers and two (2) secretaries were assigned. One (1) assistant project manager (namely, assistant executive director) is assigned with financial support by the Thai side. **2. Facilities for project management** ·Office space for the AUN/SEED-Net Secretariat was provided at the Chulalongkorn University, Bangkok, Thailand, as in the R/D **3. Partial operating of the SEED-Net Secretariat at Chulalongkorn University** Currently, domestic telephone charges, electricity and partial personnel expense were provided from the Thai side. The annual budget allocated by the Thai side is approximately THB 643,000. **4. Member Institutions will endeavor to implement the following measures where appropriate:** **PLAN:** **a) To subsidize tuition and other fees for selected disciplines and specific number of scholars.** **b) To facilitate subsidy for accommodation for scholars/faculty fellows.** **c) To facilitate the exchange of library materials and publications electronically or traditional means.** **d) To use its resources to complement the SEED-Net fund.** **e) To authorize eminent administrators or faculty members to serve in the AUN/SEED-Net secretariat or the Steering Committee when nominated / selected.** To date, 7 MIs have committed to provision of subsidy to cover 50-100% of tuition fees for extension period. 2

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
			Singaporean member institutions provide support for scholarships for Master degrees. Besides, MIs is committed provisions of support for research and conference as well. **Inputs (Japan – ASEAN Solidarity Fund, contract period November 2001 to July 2004, including the preparation period of the Project)** The Japan-ASEAN Fund, which allocated the budget of US$ 551,535.00, provided US$316,073.56 in actual for 9 master scholarships, 6 research projects, and 5 academic seminars during the period from 2001 to 2004, including the preparation period of the Project. The actual input was accounted for approximately 57% of the proposed amount. The difference was mainly due to cancellation of scholarships. Item-wise expenses were: a) Support to Research Activities: 114,407US$ (6 projects, JFY 2001 to 2002) b) Support to graduate study within the region 145,516 US$ (9 persons, from November 2001 to April 2004) c) Support to academic seminars 54,739US$ (5 seminars) The ASEAN Foundation provided the total amount of US$41,598 for 4 academic seminars in 2004.
	Have the outputs realized as planned? Output 1: Have the faculty qualifications been upgraded?	(Data & Information) · Expected and actual outputs · Comments by the parties concerned (Source) · Annual reports · Strategy paper · Reports from steering committee and JCC · Secretariat of AUN/SEED-Net	**Examining the current progress according to indicators in the original PDM, the result is as follows:** **(Output1)** **1.1 The number of applicants for scholarship to AUN/SEED-Net** **1.2 The number of applications for admission to the host graduate program,** These indicators are not appropriate to measure output 1. These are indicators of activities. (Please refer to the activities for Output 1 in the project implementation process). **1.3 The number of the academic staffs acquired higher degrees (master's and Ph.D. degrees)** As of November 2005, the total number of graduates supported by the Project is 70 persons with Master's degree and 1 person with PhD. Approximately 70% of the Master's graduates continue their career as a faculty staff. Among the remaining graduates, Some are studying or pursuing for the PhD level qualification. The Secretariat puts emphasis on academic staff (or future academic staffs) as important criteria for selection. it can be expected that the majority of students continue their carrier as academic staff after completion of their study. **1.4 The percentage of the academic staff acquired their degrees within the ASEAN region.** This indicator does not clearly relate to output 1. **(Output 2)** **2.1 The number of research publications and presentations with graduate students through thesis**

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
	Output2: Have the host graduate programs been enhanced?		**research to journals and conferences.** According to the data provided by the Secretariat, the number of publications in journals and proceedings are as the followings, In addition, there are some papers which were already accepted by journals or being prepared. - Papers published in international journals:11, - Papers published in national journals:7, - Proceedings of international conferences: 53, - Proceedings of national conferences:23 (Note: The numbers above are based on reports made to the Secretariat only as of November 2005.) **2.2 Number of citations of papers above** The data to verify this indicator is difficult to obtain and also does not necessarily show the improvement of the graduate programs of MIs. **2.3 The number and the percentage of graduate students in the host graduate program** These data are not relevant to Output 2. **2.4 The number of joint supervision of graduate students among member institutions and Japanese Universities.** This indicator is not appropriate to verify the achievement of Output 2 since it shows the progress of the activities for Output 2 (Please refer to activities for Output 2). **2.5 The number of laboratory equipment added or updated** This indicator should be included in the Inputs; therefore it is inappropriate for output 2. **(Output 3)** **3.1 Number and quality of IT-enhanced teaching materials developed.** This indicator shows the progress of the activities for Output 3;therefore this is not appropriate indicator as output 3 (refer to activity for Output 3).
	Output3: Have the joint activities and human linkage among the Member Institutions been strengthened?		**3.2 Number of institutions utilizing the teaching materials developed above.** This indicator could not be assessed by this mid-term evaluation. Since the IT course development activities started during the preparation period and ended at the beginning of the project, there is not many evidences to evaluate. **3.3 The number of joint research publications and presentations with other member institutions to Journals and conferences** This indicator is the same as indicator 2.1. In general, research publications and presentations should be based on thesis research of students under supervisions with MIs and the Japanese Supporting Universities.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
			3.4 The number of updated lecture notes and laboratory manuals There is no project activity related to this indicator. It is also difficult to collect the data of lecture notes. **3.5 The number of updated curricula** There is no project activity related to this indicator. **3.6 The number of patented research outputs supported by the project.** There is no project activity related to this indicator. **3.7 The number of trips by faculty members between two countries through the project.** 8 faculty members of MIs visited other MIs regarding the issues on collaborative research in 2004. 8 Host Institutions conducted promotional trips to the other member institutions in order to introduce their graduate course, recruit the students and possibility of cooperation on research activities in 2003 and 2004. **3.8 The number of days the faculty members stayed in other countries through the project.** This is related to indicator 3.7 and not appropriate to verify achievement of Output 3.. **3.9 The number of training program hosted by the MI.** There is no specific project activity related to this indicator. **3.10 The number of post doctoral fellows hosted by the MI.** There is no specific project activity related to this indicator. **3.11 The number of seminars/workshops** This is the indicator to assess progress of the project activities for Output 3 and is not appropriate as indicator for Output 3.
	Output4: Have the information-disseminati on system, activity		**(Output 4)** **4.1 The number of access to the Web site** • After renewal of the current AUN/SEED-Net web site in March, 2005, the data for this indicator can be obtained. After March 2005 to the end of October, the total access number is 6,064 (Note: Due to a system error, no record in June, 2005) The web site has become more comprehensive compared to the previous version. • Out of the 19 member institutions, 9 member institutions have their own web-sites with links or pages introducing the AUN/SEED-Net activities. **4.2 The number of the record of academics in the database**

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
	management system and communication network been established?		**4.3 The number of applications for the various SEED-Net support programs** **4.4 The number of posted research findings of the Member Institutions** As for 4.2 and 4.4, there are no specific activities on them. Indicator 4.3 is not critical to evaluate the information-dissemination system. **4.5 The number of inquires from outside** According to a program officer in the Secretariat, there were approximately 10-20 inquiries per year. **4.6 The number of cooperation agreements among the member institutions and Japanese universities.** There is no project activity on this indicator, rather this is an indicator to verify impacts of the Project. **4.7 Degree of utilization of the SEED-Net web site (bulletin board system, mailing lists, etc.)** • MIs mainly utilize to obtain information to participate in the Project activities. Although the previous version of the web site had bulletin board system, it ended because of difficulty in management. • 500 hard copies of theAUN/SEED-Net newsletter were printed and distributed every three months. The electronic versions of the newsletter were distributed through a mailing list of 243 readers, including the graduates supported by the AUN/SEED-Net. • 9 MIs have their own web-site with links to the AUN/SEED-NET web site. Some institution demonstrates their own web pages introducing the AUN/SEED-NET activities and the list of researches they are engaged in. **4.8 The number of Japanese Professors dispatch through the recommendations of JSUC.** This indicator is not related to Output 4, Rather, It is the data for the Inputs of the Project.
	Is it expected to achieve the Project Purpose until the completion of the Project? **(Project Purpose)** **Educational and research capacities of the Member Institutions are improved through the active exchange of resources among**	(Data & Information) • Target and achievement (if not setting the target, it is necessary to reset the target numbers) • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC	**(Indicators)** **1. Number and percentage of the academic staff with postgraduate qualifications (master's and Ph.D. degrees)** **2. The number of scholarships for graduate study received from each source** **3. The contributions from the member institutions and ASEAN countries** **4. The number of research publications and presentations** **5. The number of patented research outputs** **6. The amounts of research income and commissioned research works** • The indicator 1-4 are similar to the ones of outputs and none of them show directly the achievement of project purpose. The indicator 2 shows some indirect outputs as a result of strengthening relationships between MI and JSU. • There are no project activities regarding the indicator 4 and 5.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
	them and the collaborative relationship with Japanese Supporting University Consortium.	• Secretariat of AUN/SEED-Net	• Regarding the indicator 1, the percentage of the academic staff with post graduate qualifications supported by AUN/SEED-NET to total staff in departments of each MI can verify extent of contribution of the Project to improvement of educational capacity of each MI. • For the evaluation purpose, different perceptions of the project purpose among MIs are attributed to different issues by MI. For example, "Improvement of educational and capacity" for the HIs means some changes in the style of course work or curriculum, the number of researches, and the research schemes. On the other hand, SIs are exclusively benefited from the increase in the number of academic staff with higher degree.. For the Singaporean Host Institutions, their benefit from for the Project is limited. Participation of the MIs from Burnei is also limited only to field wise seminars.
	Is it expected to achieve the Overall Goal? **(Overall Goal) Economic sustainability is enhanced through engineering human resources development as to reinvigorate the industrial sector of ASEAN countries.**	(Data & Information) • Target and achievement (if not setting the target, it is necessary to reset the target numbers) • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-Net	**(Indicators)** **1. Functioning of sustainable human resources development system in higher engineering education** **2. Number of the academics acquiring higher degrees with in the ASEAN region** • Although the direction of project overall goal is agreed among MIs according to the questionnaire survey, there is a gap in logics between project purpose and overall goal. Human resource development in engineering field at higher education level was promoted by the Project. However, reinvigoration of the industrial sector and enhancement of economic sustainability require a lot more inputs and longer time to achieve. It is necessary to review the overall goal to be more closely and logically linked to project purpose and to be possible to achieve within five years after project completion. • It is difficult to obtain information on the indicators above. These indicators also do not show achievement of the overall goal, therefore, it would be better to change these indicators to more appropriate ones.
Implementation Process of Project	When and how was the plan of operation determined and finalized?	(Information) • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC	The basic framework of the original activity plan was discussed among MIs mainly at the inception workshops held in the beginning of the Project and at the Steering Committee Meetings (SCM) on a semi-annual basis. Considering the some issues discussed at SCM, the Secretariat prepared annual plans for detailed activities and implements them. Meetings of the Steering Committee (SC) give all Member Institutions opportunities to review the activities and to exchange their opinions and ideas. The meeting of Joint Coordinating Committee (JCC) for the Project in Thailand is jointly conducted by the Japanese side and the Thai authorities concerned for annual review.
	Have the activities been implemented as planned?	(Information) • Plan and actual activities	Most member institution personnel recognized that the Project has been going well as planned.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
		· Comments by the parties concerned (Source) · Annual reports Reports from steering committee and JCC	**(Activities for Output1)** **1.1 Establishment of quota and management system** The AUN/SEED-Net Secretariat set the annual target number of scholarships, the eligibility of applicants, the selection criteria for scholarship and other necessary rules and policies and prepared internal guideline which is reviewed annually. The details are posted on the AUN/SEED-Net web site. **1.2 Implementation of acquisition of Master's degrees within the Member Institutions.** The target number of participants acquiring Master's degree is **55 persons per annum (5 persons X 9 fields, 5 persons X 2 Singaporean Universities)**. The total number of applicants for Master's degree programs supported by the Project is 431 during the period from 2003 to 2005. For the same period, 175 students and fellows were dispatched to the Master's Programs in the targeted 9 fields at the Host Institutions. **1.3 Implementation of Ph.D. acquisition support program in the Japanese Supporting Universities** The target number of participants acquiring of PhD degree is : - **18 person / annum (2 personnel X 9 fields)** for PhD sandwich programs, - **9 persons (1 persons X 9 fields)** for Ph.D. program in Japan The total number of applicants for Ph.D. sandwich programs supported by the Project is 83 during the period from 2003 to 2005. In the end, 32 students and fellows dispatched to Ph.D sandwich program at the Host Institutions. As for Ph.D programs in Japan, there were 75 applicants in total from 2003 to 2005 and finally 22 students and fellows were dispatched to the Japanese Supporting Universities. **(Activities for Output2)** **2.1 Provision of thesis research support funds to the advisors of host graduate programs who accept those students from the Member Institutions.** The annual target of funding for research projects is **400 thousand yen / one Master student**. From 2003 to November, 2005, there were 143 projects (CR+Thesis Research Support) supported. The annual target budget for provision of research equipments is **5 million yen / field**. Please refer to the column regarding the Inputs, in particular, " c. Equipment Granted". The Project has been conducting the Thesis Research Support Program for advisors of the Host Institutions who supervise graduate students in master's degree program whose thesis research were not not under the conditions of targer of the Collaborative Research Program. As of November 2005, 18 thesis researches at the 4 Host Institutions conducted by graduate students from 6 Sending Institutions have been supported by the Thesis Research Support Program. The total amount provided for the Program was US$67,767. **2.2 Special lectures, research seminars and workshops through the dispatch of Japanese professors and prominent scholars from other member institutions.** **2.3 Joint research supervision and researches through the dispatch of Japanese professors and**

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
			prominent scholars from other member institutions. These two indicators are substantially the same. These activities are currently conducted by the Japanese professor dispatch for collaborative research and field wise seminars. Special lectures, seminars and workshops were organized during their visits related to collaborative research. The Project implemented the Japanese Professors Dispatch Program to support Japanese professors engaged in the Collaborative Research Program as co-investigators. As of November 2005, 60 Japanese professors were dispatched to the Host Institutions in order to conduct joint thesis research supervision for the AUN/SEED-Net graduate students together with academic staff of the Host Institutions. With respect to academic staff' visit to other Member Institutions, there were only three cases so far. In order to enhance capability of research supervision of the host institution, AUN/SEED-Net support joint research activities between the Member Institutions and the Japanese Supporting Universities through the Collaborative Research Program. **(Activities for Output3)** **3.1 Conduct model lectures, seminars and workshops where such activities invite the academics of other member institutions.** As complementary supports for the Collaborative Research Program, the Project provided support for the graduate students under the PhD sandwich programs and the principal and co-investigators at the Host or Non-Host Member Institutions under the Collaborative Research Program. During the period from 2003 to 2005, 61 academic staff from 10 MIs were supported by the Project for the Short-term Visits to Japan and 3 staffs from 2 MIs made short-term visits to other Host Institutions in order to enhance joint thesis research supervision and to ensure quality of research theses. (Field-wise seminars) The Project provided support for "the Field-wise Seminars" for both the Member Institutions and the Japanese Supporting Universities in order to review and evaluate the progress of research under the Collaborative Research Program and to share the research experiences and findings. Frim JFY 2003 to November JFY2005, 41 Field-wise Seminars were hosted by 12 Member Institutions. The aggregated number of participants for all the seminars was 472. **3.2 Conduct short-term training programs in the member institutions and Japanese Universities** This activity is not specifically conducted by the Project. This concept was integrated to short-term visit by fellows from SIs to MIs and Japanese Universities. **3.3 Support joint research by faculty members from more than one Member Institutions.** Researches by only faculty members are not specifically conducted by the Project.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
			3.4 Developing IT-enhanced courseware. These activities initiated since the preparation period of the Project. After the Project started in 2003, 14 IT-enhanced courseware were developed by the support of AUN/SEED-Net. **3.5 Holding academic seminars, workshops and conferences.** On an occasional basis, the Project provided support for 4 academic seminars in 2004 funded by the ASEAN Foundation. (Academic Seminars) In 2004, 4 academic seminars were held by 4 Member Institutions. The total cost for the seminars amounted US$41,598. The Project provided support for 34 participants of the seminar. (568 participants in total. The number of participants at DLSU in July, 2004 is missing) **(Activities for Output4)** **4.1 Establish organization structure and management system of the AUN/SEED-Net.** The organizational function and structure was established and no problem was reported by Member institutions at the time of mid-term evaluation. **4.2 Establishment of information dissemination system and communication network** The SEED-NET web site was renewed based on the lessons learned from the previous version and opinions from member institutions **4.3 Establish the efficient communication system between the member Institutions and Japanese Supporting Universities.** According to interviews and answers for the questionnaires prepared by the Mid-term Evaluation team, MIs and the Japanese experts understood that some measures should be taken in order to enhance the communications among MIs.
	Is the Project implementation scheme adequate?	(Information) • Reasons for project scheme and current function • Implementation scheme chart • Comments by the parties concerned	Implementation of the Project was adequate from a managerial point of view. • The Implementation scheme for the Project, is functioned well in terms of the management so far. The concept of the host in designated field and sending institutions with support by the Japanese universities is determined with approval by MIs. The current operation schemes are shown in ANNEX 3. Research activities are organized under issuesin the target fields, which is called "the Collaborative Research Umbrella". This scheme is appropriate for well-focused management and smooth implementation of the Project.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
		(Source) ・Annual reports ・Reports from steering committee and JCC ・Secretariat of AUN/SEED-NET	
	Is the management system of the project operation adequate?	(DATA & Information) ・Decision making process ・Organization charts ・Frequency of communication among the parties ・Monitoring system of students and the Project (Source) ・Human Development Department., JICA ・JICA Local Offices ・Ministry of Education in ASEAN countries ・Secretariat of AUN/SEED-NET ・Member Institutions	The management system for the Project covers necessary functions along with the scheme. and well-functioned so far. ・The majority of MIs and the Japanese experts perceive that current management of the AUN/SEED-Net secretariat is appropriate. The organizational structure of the Secretariat was established for the current Project operation after the Project started. ・As a principle, the Project office takes operational decision to conduct the Project based on feedbacks from semi-annual Steering Committee Meetings. ・Monitoring of students and activities is formally conducted once a year, led by the executive director of AUN/SEED-Net. The Project also had discussions with academic staffs and students upon other occasions such as field wise seminars and orientation for new students. The results of monitoring was feed backed to respective Host institutions and reported at Steering Committee Meetings..
	Is the involvement and support of Ministry of Education to the Project adequate?	(Data and Information) ・Financial and human resource supports by the ASEAN governments ・Comments by the parties concerned (Source) ・Annual reports	Participation of the Ministry of Education or other governmental entities in the Project has been rather limited. ・At the beginning of the Project, the involvement of the Ministries of Education in countries concerned was limited. From the start of project implementation to this Mid-term Evaluation, minutes of meeting (M/M) were exchanged between JICA and Ministries of Education of all the countries concerned except Malaysia Since AUN/SEED-Net has been operating inter-regionally within the ASEAN countries, more participation and involvement at the governmental level should be expected. It is also important for sustainability of the Project after the completion of technical assistance by JICA.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
		• Reports from steering committee and JCC • Secretariat of AUN/SEED-NET • Ministry of Education in ASEAN countries	
	Is the selection of the Member Institutions and the Japanese Supporting Universities appropriate?	(Information) • Basis of selection criteria • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-NET • Member Institutions	At the beginning of the Project, Member Institutions and Japanese Supporting Universities were appropriately selected by criteria from comprehensive viewpoints: • Criteria of selection of member institutions; membership of the AUN, recommendation by government of each country, • Consideration on selection of Japanese Supporting Universities: international course in engineering field, prominent status, experience of receiving international students. From the result of questionnaire survey by the Mid-term Evaluation, there are some opinions of the parties concerned suggesting necessity to reconsider the number or the limitation of Member Institutions and Japanese Support ing Universities in this network .
	Are the coverage of recruitment and the selection criteria for the Master and Ph.D. courses appropriate?	(Information) • Basis of selection criteria • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-NET Member Institutions	Selection criteria of Master's and Ph.D. Programs are reasonable and adequate for the purpose of AUN/SEED-Net. • The Project office announced recruitment of applicants for Master's and Ph.D. degree courses supported by AUN/SEED-Net to all Member Institutions. Students and academic staff from MIs can apply as candidates. Each HI is in charge of admission screening for Master's and Ph.D. sandwich degree programs while the Project office and the Japanese Supporting Universities are responsible for selection of candidates for Ph.D. courses in Japan. Besides general selection criteria, distribution of nationalities of candidates, in particular from less developed countries, is also considered for the selection since the AUN/SEED-Net put emphasis on those countries. This fact presents the characteristics of this network. • Regarding the academic level of students and fellows to be dispatched, 10 institutions perceived as appropriate and 5 institutions perceived as partly appropriate.
	Are the target and criteria for selecting short-term visit of faculties appropriate?	(Information) • Basis of selection criteria	• The purpose of short visits is well focused on collaborative researches. Selection for short visits to Japan is based on themes of collaborative researches. Academic staff from Member institutions can apply for the short term visit program. HIs select the members for the short visits to Japan. Then, the Secretariat is screening the applications.

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
		• Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-NET • Member Institutions	• There are a few number of short visits among MIs.
	Have the MIs, JSUs and AUN/SEED-NET Secretariat office been communicating smoothly?	(Information) • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-Net • Member Institutions	• According to parties concerned, communication between the Member Institutions and the AUN/SEED-NET Secretariat was appropriate. • Less than half of the MIs considered that there were appropriate communications among them.
	Are the participation and perception in the Project by the MIs sufficient?	(Information) • Comments by the parties concerned (Source) • Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-Net • Member Institutions	• Out of the 19 MIs, 18MIs considered their participation in the AUN/SEED-NET activities as satisfactory. • According to the interviews with the MIs and the Secretariat staff, however, some of them indicated that participation of MIs can be further increased.
	What were issues arising in the implementation process of the Project and factors affecting	(Information) • Comments by the parties concerned (Source)	According to the questionnaire by the Mid-term Evaluation, the following issues were pointed out: • Whereas commitment from HIs is significant, each activity has developed. • Difference in technology level among the countries concerned sometimes requires time to adjust. • Focus on field-wise activities led to smooth implantation of the Project

Evaluation Criteria	Evaluation Questions	Survey items & source	Result
	results of the Project?	• Annual reports • Reports from steering committee and JCC • Secretariat of AUN/SEED-Net • Member Institutions	• Sharing information through web sites was effective.

Evaluation Grid (Five Evaluation Criteria)

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
Relevance	Is the Project Purpose relevant to the needs of the Member Institutes?	Do the MIs recognize the necessity of the Project?		• Needs of the Member Institutes	• 18 respondents of the Member Institutions perceived that the project purpose is relevant to their needs. 1 institution considered the needs as partly relevant because it requires a long period of time to realize the network actively though its objective is very good. • There were 9 respondents from one institution who answered both "relevant " (5 persons) and "partly relevant". (4 persons). Through the interviews with this institution, their answers were reflected by the volume of assistance.
	Is the Project Purpose and the Overall Goal consistent with policies of the ASEAN countries?	Is the Project relevant to the higher education policies of ASEAN countries?	Are there any critical policy changes in the ASEAN countries after the start of the Project?	• Needs for higher engineering education, which are revealed in development plans and education policies by the ASEAN governments	• According to the governmental policies in the ASEAN countries, issues of " human resource development" and "technology and science " are shared by those governments in common. In this sense, the basic policies of those governments have not changed. • Some countries, including Vietnam, Cambodia, and Indonesia have a statement on promoting higher education in the field of science technology in their governmental development plan,. • The majority of respondents from member institutions considered that the overall goals is appropriate or partially appropriate as the one to be achieved within 5 years after the project completion while 2 respondents pointed that it must take longer time to achieve.
	Is the Project relevant to the Japanese ODA /cooperation policies for ASEAN Countries?	Is the Project relevant to the revised ODA charter, the Mid-term Policy on ODA and policies to support for higher education?		• Position of support for higher engineering education in the ODA Charter • ODA policy for supporting higher engineering education	• The Project is along with an approach to support human resource development including receiving exchange students and research cooperation which can contribute to industrial development. • The ASEAN region is a priority target region of the Japan's ODA. Japan has reciprocal economic relation with the Asian countries and promoted cooperation with them. • Strengthening the relationship with ASEAN countries and rectifying the disparity within the region are promoted by utilizing the resource of the Japan's ODA. The project scheme entails the concept of the assistance to the ASEAN countries. Within the ASEAN region, the the Host Institutions that have relatively more ability to receive
		Is the Project relevant to the Japan's assistance		• Position of support for higher engineering	

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
		/cooperation policy for ASEAN countries?		education in the Japan's Country Assistance Program for Thailand	students from other intuitions with support by JSUs. This scheme is suitable to the context of south-south cooperation supported by the Japan's ODA.
	Is selection of the Target Group proper?	Is coverage of the Target Group appropriate?	· Criteria for selecting the Member Institutes · Criteria for selecting students/fellows dispatched	· Comments by the parties concerned	· The coverage of members includes all institutions from the ASEAN countries and selection of the Member Institutions is based on criteria along with the purpose of the AUN membership network (with some exceptions) and recommendation by each country as prominent institutions.
	Is the Project design relevant to the project purpose?		· Appropriateness as a mean in comparison to alternatives	· Comments by the parties concerned	· Studying in the ASEAN countries requires less cost than in Japan or other developed countries. · According to the comments of academic staff and students of MIs, they can learn more local oriented technology which can be applicable to their countries.
Effectiveness	To what extent were the outputs achieved?	What were the outputs achieved so far? Is it expected that all outputs will be attained until the end of the Project?	(Outputs attained)	(Outputs attained)	· All outputs were observed partly. . In order to achieve network purpose, activities for output 3 & 4 can be strengthened further. · (Perception by MIs) Most of the respondents of MIs believed that the outputs have already been achieved or will be achieved until the end of the Project. Only 1 respondent of institution perceived that it is difficult to attain output 3 and 4.
	To what extent was the Project purpose achieved?	Was the educational capacity of target engineering post graduate program of MIs improved?	· Development of program system or course work by increased number of overseas students (for His) · Improvement of teaching	· Number of overseas students · Number of academic staffs with post graduate degree · Comments by the parties	· In the interviews at a Host Institution, the number of overseas students has increased due to the Project. Some countries are interested in an increase in the number of exchange students from the other ASEAN countries. · There was an increase in the number of academic staffs with higher degree in some Sending Institutions. SIs also recognized improvement in teaching skills and the level of post graduate students.

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
			skills/capacity	concerned	• Respondents of HIs perceived improvement of educational capacity, in terms of teaching skills, the number and level of post graduate students. Some HIs have no change in the number of teaching staff with post graduate degree. • The majority of HIs answered that contents of course work have improved. Some HIs had specific cases in terms of changes / improvement of their course works by the Project as follows: - PhD in Environmental Engineering (UP), - Infrastructure course at Post graduate level (CU)
		Was the research capacity of target engineering post graduate program of MIs improved?	• Increase in number or variation of research activities • Improvement of quality of research	• Number and contents of research activities • Comments by the parties concerned	• Almost all respondents from HIs answered that the number and quality of research activities have been improved while 2 respondents found "no change". • The collaborative research program and thesis research support program supported 143 research projects from 2003 to 2005. The program covered all the target study areas. • According to the interviews to HIs, there was an increase in the number of researches which resulted the increase in the number of papers and proceedings of both national and international journals. With support by the fund, their research capacity was enhanced and they produced better results or covered new topics in some cases. • Regarding the research capacity development of SIs, there may be some contribution by academic staff of ex-AUN/SEED-Net students. In the interviews with them, they mentioned that they are now utilizing their knowledge to teach their students. This point, however, should be verified at the time of final evaluation (better at the time of post-evaluation) when there will be more graduates.
		Is it expected that the Project Purpose will be achieved? (It is necessary to confirm among the parties concerned what the project targets to achieve specifically until its completion.)		• Plan of academic staff with master or doctor degrees • Expectation of completion of the research and plan of the	• The majority of respondents of member institutions expect that the project purpose will be achieved while a few respondents considered that it has already been achieved. • With all evidences, some achievement was observed by each MI. Thus, the Project will achieve the Project Purpose by strengthening activities further.

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
				utilization of its results	
	Have the outputs of the Project been contributing to achievement of the Project Purpose?		Linkage of the outputs and achievement of project purpose	• Implementation process of the Project • Perceptions and comments by the parties concerned	• Most of the respondents of MIs considered that Output 1 and 2 significantly contribute to achievement of the Project Purpose. In terms of Output 3 and 4, their contribution is perceived as significant or sufficient. One respondent found that output 1 and 4 slightly contributed. • Although the volume of the outputs is different in each institution, as the Project in general, each output contributed to achievement of the project purpose.
	Are there any factors affecting achievement of the Project Purpose, including both driving forces and obstacles,?		Key factors, which can be important assumptions affecting attainment of outputs or the Project Purpose	• Comments by the parties concerned	(Positive) • Commitment of MIs and JSUs is a very critical factor to the success of the Project. Where as commitment of all parties concerned is siginificant, the achievement to the Project purpose is highly possible. • According to all parties concerned, the research activities are closely linked with graduate curriculums to maintain relevancy and to bring latest developments to the students. With the sharing of technological resources and expertise, innovative curriculums and relevant research activities are nurtured to the graduate students. (Negative) • If the motivation/commitment of concerned parties is insufficient, achievement of the Project Purpose can be limited. • Discontinuity of support by MIs in terms of policy and finance can affect negatively attainment of the Project Purpose.
Efficiency	Is the current achieving outputs worth of the inputs?	Were the inputs utilized for the activities?	Analyzing the plan and the actual activities	• Plan and actual inputs for each activities • Utilization of the equipments granted	• More than half respondents of MIs considered that the inputs were appropriately used while some respondents perceived utilization of the inputs as not adequate. • According to the interviews with all parties concerned, the difference of inputs affected the answer of MIs. • Overall, the inputs were well utilized for activities and outputs.

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
		Have the activities by the inputs contributed to attainment of the outputs?	Analysis of factors affecting attainment of outputs	· Activities implemented	· The majority of Member Institutions responded that each activity has contributed to attaining the outputs while the fewer respondents answered that the activities regarding the Output 4 have not been contributing to its attainment. · According to the interviews with all parties concerned, it is found that differences in inputs and activities among MIs are affecting on the answers of MIs. At the same time, the activities for output 3 and 4 is need to be further strengthened. · Overall, the activities were contributed to the all outputs although it is necessary to make efforts on the activities of outputs 3 and 4.
	Examining the output achieved so far, are the quality, quantity and timing of the inputs appropriate?	Are the number, field, and timing of dispatched Japanese Experts for operation of the secretariat of AUN/SEED-NET appropriate?	Analyzing the plan and the actual inputs	· Actual number of the experts dispatched · Comments by the parities concerned	· In general, it was appropriate. The capacity of administration and management of the Project, however, was limited, in particular, the number of staffs responsible. · In terms of the inputs by the Japanese side, all the Member Institutions responded that the inputs of Japanese experts were appropriate.
		Are the number, field, and timing of dispatched short-term Japanese Experts from Japanese Supporting Universities (JSU) appropriate?	Analyzing the plan and the actual inputs	· Actual number of the experts dispatched · Comments by the parities concerned	· The most member institutions were satisfied with the dispatched short-term Japanese Experts from Japanese Supporting Universities while some respondents answered that the number and the timing were not necessarily adequate. · There are also some opinions from the Japanese experts of the AUN/SEED-NET secretariat and JSUs to review on the number and timing of the Japanese professors.
		Are the number, field, contents, training period and timing for the interregional exchange program of MA and Ph.D. courses appropriate?	Analyzing the plan and the actual inputs	· Actual number of students and fellows hosted by the Member Institutes · Comments by the students/fellows	· Overall, MIs appreciated the scholarship for Master's or Ph.D degree as very useful or useful. However, some MIs mentioned a need for more scholarships.

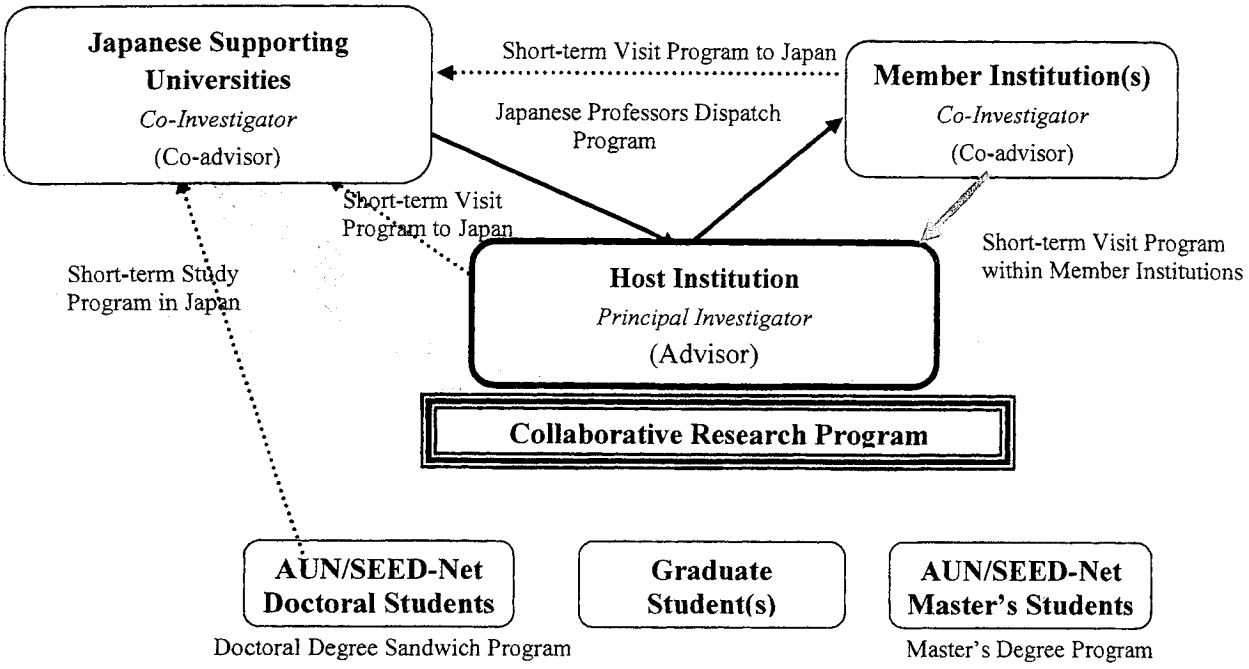
Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
				and the parties concerned	
		Are the number, field, contents, training period and timing for the short-term visit programs of the MIs' faculties appropriate?	Analyzing the plan and the actual inputs		The number of response is divided over the number of short-term visits to Japan. The certain number of respondents answered that the number of short-term visits to Japan is not sufficient.
		Are kinds, quantity, and timing of equipments provided appropriate?	Analyzing the plan and the actual inputs	• Actual number and amount of equipments granted • Actual utilization of equipments granted • Comments by the parities concerned	Most of respondents of MIs perceived provision of laboratory equipments as very useful or useful while some of them answered that the timing of equipment provision is not appropriate.
		Is the budget amount of the project activities appropriate?	Comparing and analyzing the costs of similar projects	• Annual budget and costs of AUN/SEED-NET • Cost items for the Project operation • Amount of costs shared by the Thai side • Amount of costs shared by the Japanese side	There were some efforts for inputs from the Thai and MIs side during the project implementation. It will be necessary to reconsidered on their inputs depending on the future vision of the AUN/SEED-NET.
	What are the factors affecting efficiency of the implementing			• Implementation process of the Project • Comments by	The budget increased rapidly from 2003 to 2005 along with the expansion of the activities which covers all items planned.

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
	process?			the parties concerned	
Impact	Is the achievement of overall goal highly possible? Is it expected to result from accomplishment of the project purpose?				(Positive) • The relationship and mutual understanding among the Member Institutions gave rise to a positive effect on efficiency of the project implementation. The function of the Steering Committee also positively affected efficiency as well. (Negative) • There are some negative factors affecting efficiency of the implementation process: English ability of the participants, insufficient commitments by academic staffs of SIs, an increase in the number of participants in the PhD. Sandwich Program, and MIs' visits limited to Collaborative Research. • The delay of the programs were caused by procurement and shipping equipments. which was are very time consuming procedures based on custom regulations.
	Are there any factors to affect achieving overall goal? What are those?		Important assumptions for the project purpose	• Comments by the parties concerned	It is early to evaluate achievement of the overall goal at this time.since it takes a certain time to achieve, more than 5 years after the project completion in general. In order to achieve overall goal, it requires more time and inputs. Human resource development has partly been achieving and is expected to result from accomplishment of the project purpose.
	Are there any positive/negative impacts which are unexpected?			• Comments by the parties concerned	(Positive) Some outcomes can be expected to contribute to achievement of the overall goal by linkage among universities, industries and local government. (Negative) There are some negative factors affecting achievement of overall goal: financial limitation, different management styles of MIs, and limited

Five Evaluation Criteria	Evaluation Questions		Basis for Judgment	Data Required	Evaluation
	Main Questions	Sub-Questions			
					awareness of linkage between universities and industries.
Sustainability	Are the effects of the Project by achieving the project purpose expected to be sustained after the end of the Project?	What is a future vision for management of AUN/SEED-Net?	Presence of future vision for management of AUN/SEED-Net	· Comments by the parties concerned	The most of MIs responded that there are positive impacts by the Project. The main positive impacts by the Project are development of academic network and relationships among MIs.
		Is it expected to sustain the current function of secretariat of AUN/SEED-Net?	Commitments of MIs	· Comments by the parties concerned	It is necessary to develop the strategy of the Project based on existing papers (the strategy and position papers approved by the Steering Committee). The future vision of the Project is not yet clearly defined; therefore, it is indispensable to prepare it to show clear framework of the activities within the Project period.
		Will MIs continue or establish collaborative researches and human exchanges?	· Commitment and future plan of MIs · Human capacity	· Comments by the parties concerned	Most MIs expect that the SEED-Net will fully or partly sustain while a few MIs considered limited sustainability because of no financial independence.
		Will MIs continue or establish exchange program for students from ASEAN countries?	· Commitment and future plan of MIs · Human capacity	· Comments by the parties concerned	All MIs show willingness to keep human relationships and to support the AUN/SEED-NET to be sustainable.
	Is there any factor to affect sustainability of the project impacts?			· Comments by the parties concerned	MIs expressed their intentions to continue exchange programs for students from the ASEAN countries.

Project Scheme:

Concept Structure of AUN/SEED-Net Field-wise Activities



AUN/SEED-Net's 9 engineering fields and the respective Host Institutions / Japanese Field Coordinating Universities

Host Fields	Host University
Chemical Engineering Environmental Engineering	De La Salle University (DLSU) University of the Philippines-Diliman (UP)
Manufacturing Engineering Materials Engineering	University of Malaya (UM) Universiti Sains Malaysia (USM)
Civil Engineering Electrical & Electronics Engineering Information & Communication Technology	Chulalongkorn University (CU) Chulalongkorn University (CU) King Mongkut's Institute of Technology, Ladkrabang (KMITL)
Mechanical / Aeronautical Engineering Geological Engineering	Institut Teknologi Bandung (ITB(INA)) Gadjah Mada University (UGM)

Engineering Fields	Field Coordinating Universities	
Civil Engineering	Prof. Dr. UEDA Tamon	Hokkaido University
Chemical Engineering	Prof. Dr. HINODE Hirofumi	Tokyo Institute of Technology
Electrical and Electronics Engineering	Prof. Dr. ARAKI Kiyomichi	Tokyo Institute of Technology
Environmental Engineering	Prof. Dr. KAWASAKI Junjiro	Tokyo Institute of Technology
Geological Engineering	Prof. Dr. WATANABE Koichiro	Kyushu University
Information and Communication Technology	Prof. Dr. WAKABAYASHI Toshio	Tokai University
Manufacturing Engineering	Prof. Dr. MITSUI Kimiyuki	Keio University
Materials Engineering	Prof. Dr. TSUTSUMI Kazuo	Toyohashi University of Technology
Mechanical / Aeronautical Engineering	Prof. Dr. HOMMA Hiroomi	Toyohashi University of Technology

List of Japanese Experts and Thai personnel of the Secretariat

1. Japanese Experts

As of November, 2005

	Title	Name	Duration
1	Program Manger	Mr. Kiyoshi Isaka	Dec.10, 2001-Aug. 22, 2003*
2	Chief Advisor	Prof.Dr. Kazuo Tsutsumi	Aug.12 –21, 2003 Sep.17 –20, 2003 Oct.19 –Nov 4, 2003 Dec.21 –27, 2003 Feb.5 –14, 2004 May.25 –Jun. 8, 2004 Jun.15 –27, 2004 Jul.25 –Aug.4, 2004 Aug.22 –Sep.1, 2004 Oct.6–14, 2004 Nov.24 –Dec.4, 2004 Jan. 16 –26, 2005 Feb. 24 –Mar.5, 2005 Mar.22 –Apr.9, 2005 Apr.24–29, 2005 May15 –18, 2005 Jun.2 –Apr.9, 2005 May15–18, 2005 Jun.5–18, 2005 Jun.29–Jul.14, 2005 Jul24–Aug.6, 2005 Aug.29–Sep.10, 2005 Oct.16–22, 2005 Nov.3–12, 2005 Nov. 27–Dec.10, 2005
3	Academic Advisor	Dr. Okitsugu Fujiwara	Sep.19, 2002–Sep.18, 2004*
4	Academic Advisor	Dr. Manabu Tsunoda	Nov. 16 – Dec.18, 2004 Jan.17 –23, 2005 Feb.15 – April 9, 2005 Jun. 5 – Jul. 8, 2005 Aug. 1 – 7, 2005 Aug.31 –Sep.16, 2005 Nov.9 –Dec.23, 2005
5	Coordinator	Mr. Hiroshi Iwadate	Dec. 4, 2002 – Dec. 3, 2006*
6	Program Coordinator	Mr. Nobuyuki Konishi	Mar.2001 – May.23, 2003*
7	Coordinator	Mr. Tsugihiro Shimura	Sep.27, 2002 – Sep.26, 2004*
8	Program Coordinator	Mr. Shinichi Ishihara	May 12, 2003 – Sep. 11. 2005
9	Coordinator	Mr. Masanori Nakamura	Sep. 17, 2004 – Mar. 16, 2005
10	Coordinator	Mr. Sakae Yamada	Apr. 28, 2005 – Apr. 27, 2007
11	Program Coordinator	Mr. Naoki Umemiya	Aug.28, 2005 – Aug.27, 2007

* Including the preparation period from April 2001 to March 2003.

2. Thai Personnel

As of November, 2005

	Title	Name	Duration
1	Executive Director	Prof. Dr. Panitan Lukkunaprasit	Nov.29, 2000 – July 4, 2005*
2	Executive Director	Assoc.Prof. Krisada Visavateeranon	July4,2005 to date
3	Assistant Executive Director	Assoc.Prof. Dr. Wanchai Teparaksa	Aug.15,2003 – July 6, 2004
4	Assistant Executive Director	Assoc.Prof. Dr. Somchai Jitapunkul	Oct.1,2004– May31, 2005
5	Assistant Executive Director	Assistant Prof. Dr. Tirawat Boonyatee	Oct.1, 2005 to date
6	Program Officer	Ms. Siriporn Rungrueangtanya	Jul. 1, 2002 to date
7	Program Officer	Ms. Meena Thamchaipenet	Apr. 1, 2003 to date
8	Program Officer	Ms. Sidhara Nualyai Mondrup	Mar.3, 2003– Sep.3,2003
9	Program Officer	Ms. Sirimuk Jinanarong	Apr.21, 2003– Jan.9,2004
10	Program Officer	Ms.Kalayaporn Teungfung	Mar.3, 2003 to date
11	Program Officer	Ms Siriporn Laosang	Aug. 1, 2003 to date
12	Program Officer	Ms. Parichart Thammajinda	Jan. 5, 2004 to date
13	Program Officer	Ms. Rungchalai Punninda	Nov. 16, 2004 to date
14	Secretary	Ms. Pannipa Chinavanichkit	Mar. 24, 2003 to date
15	Secretary	Ms. Wipawan Ganlanan	Jun.1, 2004 to date

* Including the preparation period from April 2001 to March 2003.

List of Master and PhD Students

Master's Degree Students Year 2003

No.	Full Name	Gender	SI	HI	Field
1	Leng Ky	M	ITC	CU	EEE
2	Ha Duyen Trung	M	HUT	CU	EEE
3	Htet Zarni Kyaw	F	YTU	CU	EEE
4	Pham Dinh Tan	M	HUT	CU	EEE
5	Sigit Basuki Wibowo	M	UGM	CU	EEE
6	Chanthaphone Khanty	M	NUOL	CU	EEE
7	Arief Setiawan Budi Nugroho	M	UGM	CU	CE
8	Vimontha Khieovongphachanh	F	NUOL	CU	EEE
9	Senglathsamy Chanthamenavong	M	NUOL	CU	EEE
10	Addy Wahyudie	M	UGM	CU	EEE
11	Iswandi	M	UGM	CU	EEE
12	Tran Tien Dac	M	HCMUT	CU	CE
13	Phongsavanh Inthavongsa	M	NUOL	CU	CE
14	Sumaryono	M	UGM	CU	CE
15	Pipong Phimphachanh	F	NUOL	CU	CE
16	Berlian Kushari	M	UGM	CU	CE
17	Ali Awaludin	M	UGM	CU	CE
18	Anousak Thammavong	M	NUOL	CU	CE
19	Le Viet Tien	M	HUT	CU	EEE
20	Phan Thi Cam Linh	F	HCMUT	DLSU	ChE
21	Dinh Van Chau	M	HUT	DLSU	ChE
22	Pham Phuong Thi Thuy	F	HCMUT	DLSU	ChE
23	Anton Purnomo	M	UGM	DLSU	ChE
24	Doan The Nam Long	M	HCMUT	DLSU	ChE
25	Dang Son Van	M	HUT	DLSU	ChE
26	War War Min Swe	F	YTU	ITB	ME/AE
27	Phan Anh Tuan	M	HUT	ITB	ME/AE
28	Duong Tran Khanh	M	HUT	ITB	ME/AE
29	Pham Huu Nghia	M	HCMUT	KMITL	ICT
30	Adha Imam Cahyadi	M	UGM	KMITL	ICT
31	Phoumy Indarack	M	NUOL	KMITL	ICT
32	Vo Thi Ngoc Chau	F	HCMUT	KMITL	ICT
33	Seumsak Douangsyla	M	NUOL	KMITL	ICT
34	Indriana Hidayah	F	UGM	NTU	ME/AE
35	Nuttawut Lewpiriyawong	M	KMITL	NTU	ME/AE
36	Abdi Robbi Sembada	M	ITB	NUS	CE
37	Arief Yudhanto	M	ITB	NUS	ME/AE
38	Nguyen Kim Phuong	F	HCMUT	UGM	GeoE
39	Nimol Vamoeurn	M	ITC	UGM	GeoE
40	Nguyen Thi Bich Ngoc	F	HCMUT	UGM	GeoE
41	Long Veasna	M	ITC	UGM	GeoE
42	U Thiha Soe	M	UY	UGM	GeoE
43	Muslim Mahardika	M	UGM	UM	ManuE
44	I Gusti Bagus Budi Dharma	M	UGM	UM	ManuE
45	Urip Agus Salim	M	UGM	UM	ManuE
46	Surojo	M	UGM	UM	ManuE
47	Thanongsak Thepsonthi	M	BUU	UM	ManuE
48	Rinlee Butch Cervera	M	UP	USM	MatE
49	Duong Ngoc Binh	M	HUT	USM	MatE
50	Usman Husni	M	ITB	USM	MatE
51	Okti Junjung Parsaoran Manalu	M	ITB	USM	MatE

Master's Degree Students Year 2004

No.	Full Name	Gender	SI	HI	Field
1	Chaymaly Phakasoum	F	NUOL	CU	EEE
2	Nguyen Bao Thach	M	HCMUT	CU	CE
3	Nofalia Andriyani	F	UGM	CU	CE
4	Masria Mustafa	F	USM	CU	CE
5	Suprapto Budinugroho	M	UGM	CU	CE
6	Lychek Keo	M	ITC	CU	EEE
7	Do Thi Tu Anh	F	HUT	CU	EEE
8	Anousone Outhailatsady	M	NUOL	CU	CE
9	Muhammad Arif Rahman Hakim	M	UGM	CU	EEE
10	Phonepheth Mounnarath	M	NUOL	CU	CE
11	Vuthy Horng	M	ITC	CU	CE
12	Alitking Anongphouth	M	NUOL	CU	CE
13	Xoumaitri Panyanouvong	M	NUOL	CU	CE
14	Pupus Adiwaluyo	M	UGM	CU	EEE
15	Avrin Nur Widiastuti	F	UGM	CU	EEE
16	Le Thi Hong Linh	F	HCMUT	DLSU	ChE
17	Mith Hasika	M	ITC	DLSU	ChE
18	Soe Soe Than	F	UY	DLSU	ChE
19	Izza Aliyatul Muna	F	UGM	DLSU	ChE
20	Hul Seingheng	M	ITC	DLSU	ChE
21	Nguyen Ngoc Diem Phong	F	HCMUT	DLSU	ChE
22	Nguyen Dinh Viet	M	HUT	DLSU	ChE
23	Nguyen Quang Long	M	HCMUT	DLSU	ChE
24	Nguyen Hoai Thu	F	HCMUT	DLSU	ChE
25	Kinnaleth Vongchanh	F	NUOL	ITB	ME/AE
26	Nguyen Ngoc Dung	M	HCMUT	ITB	ME/AE
27	Chan Sarin	M	ITC	ITB	ME/AE
28	Duong Van Yen	M	HUT	ITB	ME/AE
29	Rey Sopheak	M	ITC	ITB	ME/AE
30	Tran Quang Tuyen	M	HCMUT	ITB	ME/AE
31	Deuansavanh Phommavongsa	M	NUOL	ITB	ME/AE
32	Nguyen Quang Nguyen	M	HUT	ITB	ME/AE
33	Thinh Tran Ngoc	M	HCMUT	KMITL	ICT
34	Nguon Taing	M	ITC	KMITL	ICT
35	Vuong Tran Xuan	M	HCMUT	KMITL	ICT
36	Theng Vilayphone	M	NUOL	KMITL	ICT
37	Sisavath Khotpanya	M	NUOL	KMITL	ICT
38	Su Su Muang	F	YTU	KMITL	ICT
39	Soumek Inthala	M	NUOL	KMITL	ICT
40	Lia Maisarah Umar	F	ITB	NTU	ME/AE
41	Setiaji Ryan Rahmat	M	UGM	NUS	CE
42	Aripin Wiryi	M	UGM	NUS	CE
43	Situmorang Elisabeth Rianawati	F	ITB	NUS	ChE
44	Nanthady Sombath	M	NUOL	NUS	ICT
45	Un Amata	M	ITC	NUS	ME/AE
46	Mohd Ashraf Mohamad Ismail	M	USM	UGM	GeoE
47	Aimee Calibugan	F	UP	UGM	GeoE
48	Bui Thi Tai	F	HCMUT	UGM	GeoE
49	Tin May Htun	F	UY	UGM	GeoE
50	Gunawan Setia Prihandana	M	UGM	UM	ManuE
51	Herianto	M	UGM	UM	ManuE
52	Sompong Vongphosy	M	NUOL	UM	ManuE
53	Lamphanh Sisamouth	M	NUOL	UM	ManuE
54	Hoang Tuan Dung	M	HUT	UP	EnvE
55	Vo Thi Le Ha	F	HUT	UP	EnvE
56	Bui Duc Long	M	HUT	USM	MatE
57	Le Pham Ngoc Quynh	M	HUT	USM	MatE
58	Nguyen Ngoc Minh	M	HUT	USM	MatE
59	Ardhyanawta Hosta	M	ITB	USM	MatE
60	Setiwan Asep Ridwan	M	ITB	USM	MatE

Master's Degree Students Year 2005

No.	Full Name	Gender	SI	HI	Field
1	Muriel Naguit	F	UP	CU	CE
2	Menghong Ung	M	ITC	CU	CE
3	Irene Olivia Ubay	F	DLSU	CU	CE
4	Prapto Nugroho	M	UGM	CU	EEE
5	Xaysomphone Kounlabout	M	NUOL	CU	EEE
6	Ha Hoang	M	HUT	CU	EEE
7	Nguyen Khac Hieu	M	HUT	CU	EEE
8	Budi Hashiholan Siregar	M	ITB	CU	CE
9	Nguyen Vinh Ich	M	HUT	CU	EEE
10	Nay Myo Tun	M	UY	CU	EEE
11	Andrianus Yofy	M	UGM	CU	EEE
12	Menghour Phann	M	ITC	CU	CE
13	RR Eny Sukani Rahayu	F	UGM	CU	EEE
14	Rani Nurcharissa	F	ITB	CU	CE
15	Tan Reasmey	F	ITC	DLSU	ChE
16	Mi Eai Htaw	F	YTU	DLSU	ChE
17	Tun Naing Win	M	YTU	DLSU	ChE
18	Dyah Setia Novianti	F	UGM	DLSU	ChE
19	Reniek Fitriany Munif	F	UGM	DLSU	ChE
20	Lin Lin Tun	F	UY	DLSU	ChE
21	Ly Hung Anh	M	HCMUT	ITB	ME/AE
22	Nguyen Tran Nam	M	HCMUT	ITB	ME/AE
23	Nguyen Van Bo	M	HUT	ITB	ME/AE
24	Thein Min Htike	M	YTU	ITB	ME/AE
25	Nguon Kollika	M	ITC	ITB	ME/AE
26	Khamtanh Santisouk	M	NUOL	ITB	ME/AE
27	Thongsamlith Onemanisone	M	NUOL	KMITL	ICT
28	Donekeo Lakanchanh	M	NUOL	KMITL	ICT
29	Phok Chrin	M	ITC	KMITL	ICT
30	Chanthea Khun	M	ITC	KMITL	ICT
31	Hlaing Myat Su	F	UY	KMITL	ICT
32	Le Thanh Sach	M	HCMUT	KMITL	ICT
33	Tuan Hung Tran	M	HUT	KMITL	ICT
34	Willy Kurnia	M	ITB	NTU	ManuE
35	Roger Phetdaleen	F	NUOL	NUS	EEE
36	Samsu Sukaimi Hendra	M	UGM	NUS	CE
37	Imma Nuella	F	ITB	NUS	ChE
38	Deny Hartono	M	ITB	NUS	ChE
39	Tobias Bestari	M	UGM	NUS	ME/AE
40	Danan Suryo Wicaksono	M	ITB	NUS	ChE
41	Angeline Abrenica	F	UP	UGM	GeoE
42	May Raksmey	M	ITC	UGM	GeoE
43	Leang Sopheap	M	ITC	UGM	GeoE
44	Myo Min Tun	M	UY	UGM	GeoE
45	Keophusone Phonhalath	F	NUOL	UGM	GeoE
46	Dang Thuong Huyen	F	HCMUT	UGM	GeoE
47	Jay Arre Toque	M	UP	UM	ManuE
48	Hoang Le Minh	M	HCMUT	UM	ManuE
49	Waratta Authayarat	F	BUU	UM	ManuE
50	Indro Pranoto	M	UGM	UM	ManuE
51	Julirose Gonzales	F	DLSU	UM	ManuE
52	Agung Bramantya Muhammad	M	UGM	UM	ManuE
53	Keokhamphui Keoduangchai	M	NUOL	UP	EnvE
54	Sioudom Khamfeuane	M	NUOL	UP	EnvE
55	Sihalath Souksakhone	F	NUOL	UP	EnvE
56	Tran Duc Chung	M	HUT	UP	EnvE
57	Nguyen Thi Du	F	HUT	UP	EnvE
58	Pham Thi Thanh Thuy	F	HCMUT	UP	EnvE
59	Ros Sobonn	M	ITC	UP	EnvE
60	Vilay Vannaladsaysy	M	NUOL	USM	MatE
61	Chea Chandara	M	ITC	USM	MatE
62	Niki Prastomo	M	ITB	USM	MatE
63	Pham Trung Kien	M	HCMUT	USM	MatE
64	Tran Thi Thien Ly	F	HUT	USM	MatE

Students under Doctoral Degree Program in Japan 2003

No.	Field	Sending Institution	Sending Country	Name	JP University	Advisor	Commencement
1	EEE	KMITL	Thailand	Ms. Sutheera Puntheeranurak	Tokai	Prof. Dr. TSUJI Hidekazu	Oct-03
2	EEE	NUOL	Laos	Mr. Khamphong Khongsomboon	Tokai	Assoc. Prof. Dr. SHIMIZU Naohiko	Apr-04
3	GeoE	UGM	Indonesia	Mr. Lucas Donny Setijadji	Kyushu	Prof. Dr. WATANABE Koichiro	Oct-03
4	ME/AE	ITB (INA)	Indonesia	Mr. Sandro Mihradi	TUT	Prof. Dr. HOMMA Hiroomi	Dec-03

Students under Doctoral Degree Program in Japan 2004

No.	Field	Sending Institution	Sending Country	Name	JP University	Advisor	Commencement
1	CE	HCMUT	Vietnam	Mr. Tran Tuan Anh	Hokkaido	Prof. Dr. MITACHI Toshiyuki	Oct-04
2	EEE	HUT	Vietnam	Mr. Nguyen Hoang Hai	U of Tokyo	Prof. Dr. KIKUCHI Kazuro	Apr-05
3	EEE	CU	Thailand	Mr. Surachai Chaitusaney	U of Tokyo	Prof. Dr. YOKOYAMA Akihiko	Oct-04
4	EnvE	UGM	Indonesia	Mr. Mohammad Kholid Ridwan	TIT	Assoc. Prof. Dr. KANDA Manabu	Oct-04
5	GeoE	HCMUT	Vietnam	Mr. Ho Trong Long	Kyushu	Prof. Dr. USHIJIMA Keisuke	Oct-04
6	ICT	KMITL	Thailand	Ms. Panarat Cherntanomwong	TIT	Prof. Dr. TAKADA Junichi	Oct-04
7	ManuE	UM	Malaysia	Mr. Chin Joo Tan	TUT	Prof. Dr. MORI Ken-ichiro	Apr-05
8	MatE	USM	Malaysia	Mr. Yeoh Fei Ye	TUT	Prof. Dr. TSUTSUMI Kazuo	Dec-05
9	ME/AE	UGM	Indonesia	Mr. Rachmat Sriwijaya	TIT	Assoc. Prof. Dr. TAKAHASHI Kunio	Oct-04

Students under Doctoral Degree Program in Japan 2005

No.	Field	Sending Institution	Sending Country	Name	JP University	Advisor	Expected Commencement
1	CE	UGM	Indonesia	Mr. Ali Awaludin	Hokkaido	Prof. Dr. HAYASHIKAWA Toshiro	Oct-05
2	ChE	HUT	Vietnam	Mr. Chau Dinh Van	TIT	Assoc. Prof. Dr. KUBOUCHI Masatosh	Apr-06
3	EEE	ITC	Cambodia	Mr. Po Kimtho	TIT	Assoc. Prof. Dr. TAKADA Junichi	Oct-05
4	EnvE	UGM	Indonesia	Mr. Wawan Budianta	TIT	Prof. Dr. OHTA Hideki, Prof. Dr. HINODE Hirofumi	Oct-05
5	GeoE	HCMUT	Vietnam	Ms. Nguyen Kim Phuong	Kyushu	Prof. Dr. ITOI Ryuichi	Oct-05
6	ICT	UGM	Indonesia	Mr. Adha Imam Cahyadi	Tokai	Prof. Dr. YAMAMOTO Yoshio	Oct-05
7	ManuE	UGM	Indonesia	Mr. Muslim Mahardika	Keio	Prof. Dr. MITSUI Kimiyuki	Apr-06
8	MatE	UP	Philippines	Mr. Rinlee Butch Cervera	U of Tokyo	Prof. Dr. YAMAGUCHI Shu	Oct-05
9	ME/AE	HUT	Vietnam	Mr. Tran Khanh Duong	TUT	Prof. Dr. YANADA Hideki	Dec-05

PhD Sandwich Students Year 2003

No.	Full Name	Gender	SI	HI	Field
1	Cho Cho Thet	F	UY	CU	EEE
2	Nazrul Effendi	M	UGM	CU	EEE
3	Lim Sok Tay	M	ITC	CU	CE
4	Khampheth Bounnady	M	NUOL	KMITL	ICT
5	Kham Khanthavivone	M	NUOL	KMITL	ICT
6	Su Su Kyi	F	UY	UGM	GeoE

PhD Sandwich Students Year 2004

No.	Full Name	Gender	SI	HI	Field
1	Nan Thidar Chit Swe	F	UY	CU	EEE
2	Sarjiya	M	UGM	CU	EEE
3	Le Trong Nghia	M	HCMUT	CU	CE
4	Ashar Saputra	M	UGM	CU	CE
5	Sony Sulaksono Wibowo	M	ITB	CU	CE
6	Tran Ung Hai	F	HCMUT	DLSU	ChE
7	Ky Phuong Ha Huynh	M	HCMUT	DLSU	ChE
8	Hak Sok Chea	M	ITC	DLSU	ChE
9	Le Xuan Truong	M	HUT	ITB	ME/AE
10	Nguyen Dinh Tu	M	HCMUT	UGM	GeoE
11	Gesang Nugroho	M	UGM	UM	ManuE
12	Le Thi Hong Tran	F	HCMUT	UP	EnvE
13	Sukiman Kusmono	M	UGM	USM	MatE

PhD Sandwich Students Year 2005

No.	Full Name	Gender	SI	HI	Field
1	Tran Van Mien	M	HCMUT	CU	CE
2	Douangmixay Dounsuvanh	M	NUOL	CU	CE
3	Chan Kok Hooi	M	USM	CU	CE
4	Anton Purnomo	M	UGM	DLSU	ChE
5	Dang Son Van	M	HUT	DLSU	ChE
6	Vo Thi Ngoc Chau	F	HCMUT	KMITL	ICT
7	Hidayat Risanuri	M	UGM	KMITL	ICT
8	Nguyen Minh Trung	M	HCMUT	UGM	GeoE
9	Myo Thant	M	UY	UGM	GeoE
10	Herliansyah Muhammad	M	UGM	UM	ManuE
11	Fauzun	M	UGM	UM	ManuE
12	Srioudom Khamfeuane	M	NUOL	UP	EnvE
13	Duong Ngoc Binh	M	HUT	USM	MatE

List of Master Graduates, Research Projects and Academic Seminars Supported by JAPAN- ASEAN Solidarity Fund

(1) List of Master Graduates

Name	SI	Field of Study	HI
1. Mr. Tha Bounthanh	NUOL	Computer	KMITL
2. Mr. Khampheth Bounnady	NUOL	Computer	KMITL
3. Mr. Kham Khanthavivone	NUOL	Telecommunication	KMITL
4. Mr. Khamphon Khongsomboun	NUOL	Telecommunication	KMITL
5. Mr.Somphone Kanthavong	NUOL	Information Technology	KMITL
6. Mrs. Nouanchanh Panyanouvong	NUOL	Information Technology	KMITL
7. Ms. Nguyen Thi Thu Ha	HUT	Biotech & Food	CU
8. Mr. Wahuy Wilopo	UGM	Water Resources	CU
9. Mr. Soe Thein	UY	Survey	CU

(2) List of Research Projects

Project Title	HI/Field	Project Period
To Study the Effect of Rain, TEC, Magnetic Storm and Weather on Satellite Link	USM/EEE	Jan. - Mar. 2002
To Develop Lightweight Foam Concrete Structural Elements for the Construction of Low Energy Houses in the Kampong (Water Village) of Brunei Darussalam	ITB/ CE	Jan. - Oct. 2002
FPGA Implementation of MELP Encoder / Decorder	NTU/ EEE	Jan.- Dec. 2002
Fabrication and Characterization of High-Tc Superconducting Thin Films	HUT/ EEE	Jan. 2002 - Dec. 2003
Estimating Future Needs of Transportation Infrastructure and Services in the Southeast Asian Region	UGM/CE	Jun. 2002 - Mar. 2003
Effects of Ethanol Contents on Diesohol Compression Ignition Engine Combustion and Emissions	CU/ ME	Jul. 2002 - Dec. 2003

(3) List of Academic Seminars

Seminar Title	HI	Venue	Period
The Experimental & Theoretical Mechanics 2002 (ETM 2002)	ITB	Bali, Brunei	Mar. 18 - 19, 2002
14th International Photovoltaic Science and Engineering Conference	CU	Chulalongkorn Universiy, Thailand	Jan. 26 – 30, 2004
The Workshop on High-Tc Superconducting Material s and Application (WHISMAS' 2004)	HUT	Hanoi, vietnam	Apr. 15 – 16, 2004
Regional Conference on Aeronautical Science, Technology and Industry (RC-ASTI) 2004	ITB	ITB, Bandung, Indonesia	May 18 – 19, 2004
3rd International Conference on Engineering Education (ICEE)	DLSU	Manila, Philippines	Jul. 26 – 27, 2004

Cost-sharing : Actual Implementation and Commitment from Member Institutions
as of 14 Nov 2005

ANNEX 7

No	Type	By MI	Scope of Contribution	Status / Expenses (USD)		Period	Remark
				Implemented	Committed		
1	Secretariat office & personnel	CU	Office space with some necessary facilities including electricity and water supply and Demestic telephone charges (100% allowance fee; Secretariat personnel (ED, AED)			2001 onwards	
2	Extension of Scholarship	NTU	100% tuition fee and in some cases 1/3 allowance	3 cases 6,110		2003-2005	
3		NTU	100% tuition fee for maximum 1 semester		1,400/student/semester	2005 onwards	
4		NUS	100% tuition fee for maximum 1 semester		1,400/student/semester	2005 onwards	
5		CU	100% tuition fee	1 case 1,740		2004	
6		CU	50% tuition fee	2 cases 1,740		2005	
		CU	100% tuition fee		1,740/student/semester	2006 onwards	formal letter
7		KMITL	50% tuition fee		370/student/semester	2005 onwards	
8		UP	100% tuition fee for maximum 1 semester		700/student/semester	2005 onwards	
9		USM	100% tuition fee for maximum 1 semester	2 cases 560	280/student/semester	2005 onwards	
10		DLSU	100% tuition fee for 1 semester for PhD student only		(to be confirmed)	2005 onwards	unofficial commitment
11	Master's Scholarship	NUS	2-3 partial Master's scholarships per year with 50% tuition fee and 50% allowance	2 cases 6,680	3,340/student/semester	2005 onwards	
12		NTU	2-3 Master's scholarships per year (when quota of 5 is fullfilled)		6,680/student/semester	2005 onwards	
13	Upgrading of Master's student to PhD candidates	NTU	100% tuition fee and 100% allowance during additional 1.5-2 years		6,680/student/semester	2005 onwards	
14		NUS	100% tuition fee and 100% allowance during additional 1.5-2 years		6,680/student/semester	2005 onwards	
15	Direct PhD scholarships	NUS	3 scholarships per year with 100% tuition and 100% allowance for 4 years		6,680/student/semester	2006 onwards	
16	Conference Participation	NTU	Support of expenses to present paper at conferences to outstanding students	1 case 940	Maximum 1,180	2005 onwards	Overseas Conference
17	Conference Participation	NUS	Support of expenses to present paper at conferences to outstanding students	1 case 290	Maximum 2,370	2005 onwards	Overseas Conference

Schedule of Mid-term Evaluation

ANNEX 8

		Team 1							Team 2			Team 3					
		Thailand			Philippines		Malaysia		Indonesia		Cambodia	Vietnam		Laos	Singapore		Remarks
		Secretariat	CU	KMITL	UP	DLSU	UM	USM	ITB	UGM	ITC	HUT	HCMUT	NOUL	NTU	NUS	
11/15	Tue													BKK→VTN, Survey,JICA			FWS:EEE
11/16	Wed	Tokyo→BKK												VTN→BKK			
11/17	Thu	preparation		Survey													
11/18	Fri	preparation															
11/19	Sat	preparation															
11/20	Sun	BKK→KL					BKK→KL										
11/21	Mon						Survey, MOE, JICA										
11/22	Tue						KL-Penang	Survey									
11/23	Wed				Manila ←		SG ←	Penang		Tokyo→YJ							
11/24	Thu					Survery, JICA				Survery					BKk-Singapore		
11/25	Fri			BKK ←	Survery, CHED				JICA, MOE	YJ→Jakarta					Survey	Survey(2:30) SG→BKK	
11/26	Sat								preparation								
11/27	Sun								preparation								
11/28	Mon								Survey			BKK→Hanoi					
11/29	Tue								Jakarta→SG →		PP	Survey, MOET, JICA					FWS:CheE/EnvE
11/30	Wed		BKK ←								Survey, MOE, JICA		HAN→HCM Survey				FWS:CheE/EnvE
12/1	Thu																FWS:CheE/EnvE
12/2	Fri		Survey														FWS:CheE/EnvE
12/3	Sat	preparation															
12/4	Sun	preparation															
12/5	Mon	preparation															
12/6	Tue	Meeting with AUN, TICA															
12/7	Wed	Meeting with JCC															FWS:GeoE
12/8	Thu	preparation															FWS:GeoE
12/9	Fri	Signing of Minutes, Report to J Embassy, JICA office															FWS:GeoE

List of Main Interviewees by the Team

ANNEX 9

Member Institutions

Name	Title	
Assoc. Prof. Dr. Saykhong SAYNASINE	Vice president for Planning and International Relations	MI
Prof. Dr. Mohamad Rom Tamjis	Dean, Faculty of Engineering	NUOL
Assoc. Prof. Dr. Khairun Azizi Mohd Azizli	Dean, Faculty of Engineering	UM
Prof. Dr. Pag-asa Gaspillo	Dean of the College of Engineering	USM
Assoc. Prof. Dr. Rowena Cristina L. Guevara	Dean of college of Engineering	DLSU
Prof. Dr. Michael Khor	Director, Research Office	UP
Prof. Dr. Chow Yean Khow	Vice-Dean, Graduate Studies	NTU
Prof. Dr. Djoko Suharto	Vice Chairman, Board of Trustees	NUS
Prof. Dr. Sudjarwadi	Senior Vice-Rector for Academic Affairs	ITB
Dr. Phoeurng Sackona,	Director	UGM
Assoc. Prof. Dr. Thanit Thongtong	Head, Civil Engineering Department	ITC
Assoc. Prof. Dr. Tawil Phuangma	Dean, Faculty of Engineering	CU
Asst. Prof. Dr. Wirogana Ruengpharathuengsuka	Dean, Faculty of Engineering	KMITL
Dr. Nguyen Thanh Son	Vice Rector	BUU
Prof. Ha Manh Thu	Vice Director of ICD	HCMUT
		HUT

Ministry of Education

Mr.Mohamed Anuar B. Mohamed Zainum	Senior Principal Assistant Director, MOE, Malaysia
Prof. Dr. Satriyo Soemantri Brodjonegoro	Director General of Higher Education, MOE, Indonesia
Mr. Mai Anh	Deputy Director General, International Cooperation Department, MOET, Vietnam
H.E. Pit Chamnan	Secretary of State, MOEYS, Cambodia
Ms.Ethel Agnes P. Valenzuela	CESO IV Director IV, CHED, Philippine
Ms. Aporn Kanvong	Director, CHE, Thailand

AUN

Assoc. Prof. Dr. Piniti Ratananukul	Executive Director

TICA

Ms. Pumpuey Pattamavichaiporn	Director, External Cooperation Division

JICA Office

Mr. Mori Senya	Resident Representative, JICA Laos Office
Mr. Murata Akira	Resident Representative, JICA Malaysia Office
Mr. Matsuura Shozo	Resident Representative, JICA Philippine Office
Mr. Totsuka Shinji	Deputy Resident Representative, JICA Indonesia Office
Ms. Nakamura Sayaka	Deputy Resident Representative, JICA Vietnam Office
Mr. Juro Masayoshi	Resident Representative, JICA Singapore Office
Mr. Mitsugi Hiroto	Deputy Resident Representative, JICA Cambodia Office