Annual Report
2001

Message from
H.E. Ambassador of Japan to the Kingdom of Thailand

It is with the greatest pleasure that I congratulate on the publication of the first annual report on activities of AUN/SEED-Net Project.

In April of last year, the ten ASEAN countries together with the Japanese representatives agreed to launch the AUN/SEED-Net project and to set up the Secretariat at Chulalongkorn University in Bangkok. Based on the agreement, the project has built up a network among the member institutions and consolidated the foundation for further cooperation through implementing various programmes such as Master's Degree Programme and Research Support Programme. Such achievements would not have been possible without the efforts of all parties involved, namely the member institutions, Japanese Supporting Universities, the AUN/SEED-Net Secretariat, as well as JICA experts. I would like to express my deepest appreciation for the great effort of all the people involved.

AUN/SEED-Net Project was inaugurated to develop human resources in order to improve technological standards for strengthening international competitiveness and enhancing the industrial foundation of ASEAN countries; aimed at overcoming the Asian Economic Crisis triggered by the Thai Currency Crisis in July 1997. Looking back on the economic development in Asian over the past few decades, it has become evident that the role of human resource development is critical to the success of long-term economic development. From this point of view, the project is expected to contribute greatly to human resource development through enhancement of capability for research and education in the field of engineering in ASEAN countries, creating a base for sustainable economic development in the region.

Looking at the history of economic and technical cooperation between Japan and ASEAN countries, this project is innovative and challenging in the sense that it aims to develop regional cooperation among nineteen member universities in the ten ASEAN countries. Japan will continue to play an important role in facilitating such regional cooperation among the ASEAN countries. I believe that the project represents a new cooperation framework beyond bilateral cooperation, which constitutes a crucial test for future Japanese economic and technical cooperation.

I would like to take this opportunity to express my heartfelt gratitude to all stakeholders who have worked for the development of the project and to thank the government of Thailand for the establishment of the Secretariat office as the base for the project activities. I sincerely wish the success of the project through the cooperative efforts of all people concerned to achieve development of research and education in the field of engineering in ASEAN countries.

H.E.Mr. Atsushi Tokinoya
Ambassador Extraordinary and
Plenipotentiary
The Embassy of Japan

Message from
Permanent Secretary for Unverisity Affairs, Thailand
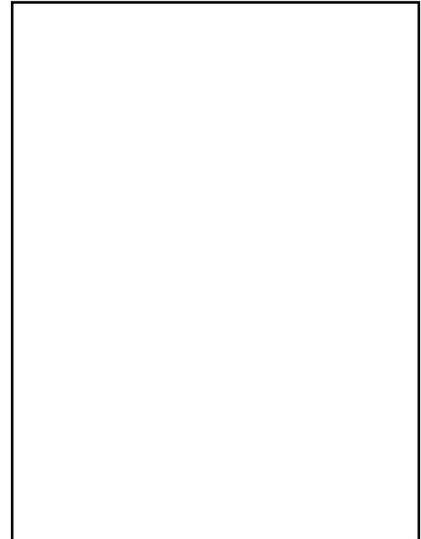# Chairman of AUN Board of Trustees

The initiative of the former Prime Minister of Japan H.E. Mr. Ryutaro Hashimoto in 1997 to enhance economic sustainability in ASEAN through human resources development was really visionary and timely, in view of economic crisis in Asia which started in July 1997. In the era of globalisation where borders could no longer impede the mobility of workforce, we need to build up human resources with high calibre who could perform their services competitively in a dynamic international environment.

I am pleased to learn that considerable progress has been made since the Inauguration Ceremony of the AUN/SEED-Net Secretariat at Chulalongkorn University on April 23, 2001. Various kinds of co-operative activities, mainly the Master's Degree Programme and Research Support Programme have started to be implemented, which are aimed to promote upgrading of higher engineering education in the region through active collaboration among the Member Institutions and Japanese Universities. It is gratifying to see ASEAN and Japan joining hands in worthwhile endeavour like the AUN/SEED-Net.

The AUN/SEED-Net Project is the first project of JICA which targets all countries of ASEAN. It is also the first multi-lateral project under the responsibility of Ministry of University Affairs of Thailand. As anticipated by the Japanese side, the unprecedented nature of the Project may cause problems or difficulties in the course of implementation of the Project. As

the host country of the AUN/SEED-Net Secretariat, Thailand, through the Ministry of University Affairs, has committed to render her full support to enable the Project to run smoothly and effectively. Now the main hurdles have been resolved, and the Project is expected to move ahead in full steam in the coming years.

On the occasion of the first anniversary of AUN/SEED-Net Secretariat, I would like to take this opportunity to express my sincere gratitude to the Government of Japan and all ASEAN Governments whose endeavours are the most contributing factor for the smooth and effective implementation of the Project. AUN/SEED-Net will not only serve as the capacity building mechanism leading to the enhancement of a strong engineering education base needed for ASEAN's competitiveness in the world market, but also contribute to the accomplishment of the ideology of ASEAN spirit. I have a high hope that the closer links developed throughout the course of this project would lead to further collaboration and long lasting friendship between ASEAN and Japan in the years to come.

Professor Voradej Chandarasorn,
Ph.D.
Permanent Secretary for
University Affairs
Chairman of AUN Board
of Trustees

Message from
Resident Representative
JICA Thailand Office

It is my great pleasure to acknowledge the first Annual Report of AUN/SEED-Net activities from April 2001 to June 2002. Looking back over the past development of AUN/SEED-Net Project, it has been a long process to formulate and prepare the project, involving many people both in ASEAN countries and in Japan. I would like to express my deepest appreciation for the tremendous effort and enthusiasm devoted to such preparatory work.

The AUN/SEED-Net Project is a very special kind of technical cooperation and JICA has never implemented such an important region-wide project before. It project covers nineteen universities in ten ASEAN countries, aiming to create a network among the Member Institutions and Japanese supporting universities. Another feature of the project is that it is a combination of regional cooperation and bilateral cooperation. The nature of the project makes it quite unique and challenging.

Now, we have come to recognize that JICA's cooperation has entered into a new stage where regional cooperation across countries has become central to our activities. AUN/SEED-Net Project is representative of the direction of regional cooperation. The project fosters regional cooperation through implementing Master's Degree Program among the Member Institutions in ASEAN countries. At present, about thirty people from the Member Institutions go abroad to study in other Member Institutions, which contributes greatly to creating a network among the Member Institutions.

In April of this year, AUN/SEED-Net project launched JICA Supporting Programs primarily in order to enhance regional cooperation among ASEAN countries. We started to dispatch Japanese professors to the Member Institutions, and will implement a Short-term Study Program in Japan in December of this year. I believe that such supporting programs will contribute not only to enhancing the regional cooperation among the Member Institutions but also to strengthening the collaborative relationship between the Member Institutions and Japanese supporting universities.

Lastly, I sincerely wish all the stakeholders will cooperate with each other for the success of the project. JICA will continue to support the AUN/SEED-Net Project to ensure effective and efficient implementation of the project.

Shinya, Nakai
Resident Representative
JICA Thailand Office

Message from
AUN/SEED-Net Executive Director

During the first year of operation after the Inauguration Ceremony of the AUN/SEED-Net on April 23, 2001, the Secretariat spent much effort in formulating an effective and workable strategic plan for the AUN/SEED-Net five-year implementation, as well as securing the Thai Government's approval for facilitating protocols and providing special privileges for Japanese long term experts to be stationed in Thailand. Thus, implementation has been limited to only a few activities of the Project.

During May to September, 2001, AUN/SEED-Net dispatched Preparatory Study Teams to all 19 Member Institutions to gather relevant information and to assist them in working out Action Plans. The Workshop on "Formulating AUN/SEED-Net Strategy and Action Plan of the Member Institutions" was subsequently held in October 2001 to map out a final strategic plan for implementation. The outcome of brainstorming led to the final blueprint of the "Strategy Paper". This marks another important milestone in the AUN/SEED-Net's operation.

The Network, to my observation, has stimulated much enthusiasm and high expectations among the Member Institutions, as indicated clearly by the large number of project proposals (more than 150) submitted for the Inception Project launched on the occasion of the Inauguration Ceremony. Furthermore, high spirit of cooperation has been witnessed. I am delighted to inform you that, besides the generous funding by the Japanese Government through JICA and the Japan-ASEAN Solidarity Fund, other Member Institutions also contribute, or will contribute, to the Project. Chulalongkorn University (CU) hosts the AUN/SEED-Net Secretariat office. The National University of Singapore (NUS) and Nanyang Technological University (NTU) are willing to offer annually a few scholarships to highly qualified faculty staff from Member Institutions. They will also support manpower expertise in Higher Degree Research / Training or Seminars. Universities in Malaysia have also expressed their wish to offer contributions. In fact, resource persons from NTU, NUS, and other Member Institutions have contributed to the success of an IT seminar recently held in Singapore.

As of June 17, 2002, 27 students from 6 Member Institutions have been studying in 6 Host Universities in Singapore, Thailand, Malaysia, and the Philippines. 23 research projects are under way, several of them collaboratively carried out among two or three Member Institutions. One international conference on "Experimental and Theoretical Mechanics" was partially supported by AUN/SEED-Net.

The power and impact of IT on education has been well recognised among members of the Network. The first IT Seminar on "Using Information Technology to Enhance Engineering Education" was jointly hosted by Nanyang Technological University and National University of Singapore on 16-17 May 2002, with the accomplishment of setting the strategy on IT-enhanced courseware development and the set up of the policy on IT-enhanced education.

In the coming year, the Secretariat looks forward to a full-scale operation now that the major groundwork has been laid, thanks to the cooperation of Ministry of Foreign Affairs of Japan, JICA, ASEAN Foundation, Ministry of University Affairs of Thailand, Ministry of Education, Culture, Sports, Science and Technology of Japan, ASEAN University Network, Japanese Supporting University Consortium, and Member Institutions. With the partnership of all parties, united with Solidarity and Sincerity, I am confident that the Project would be a success and contribute to human resource development for sustainable economy in the region.

Prof. Dr. Panitan Lukkunaprasit
Executive Director

Contents

Milestones

December 1997
   Concept of SEED-Net evolved due to an
   initiative of H.E. Mr. Ryutaro Hashimoto
   for human resource development in ASEAN

November 1999
   SEED-Net Project incorporated as one
   of the main programmes of the "OBUCHI-
   Plan"

March 2001
   Establishment of the Japanese Supporting
   University Consortium

23 April 2001
   Inauguration of AUN/SEED-Net at
   Chulalongkorn University, Bangkok,
   Thailand

24-26 October 2001
   Workshop on Formulating AUN/SEED-Net
   Strategy and Action Plans

21 November 2001
   Signing of Contract between ASEAN
   Foundation and AUN/SEED-Net Secretariat

28 January 2002
   Approval of Strategy Paper

**Scholarships, Research Projects Granted and
Related Support Programmes Implemented**
(As of June 17, 2002)

Note: See Appendix 2-5 for details

Annual Report
AUN/SEED-Net Activities
April 23, 2001 – June 17, 2002

Inauguration of the AUN/SEED-Net

The AUN/SEED-Net was formally inaugurated on April 23, 2001 as an autonomous sub-network under the auspices of AUN. The inauguration ceremony was held at Chulalongkorn University, Bangkok, Thailand

The "Cooperative Framework" document was signed by the top ranking officials (or their representatives) of 19 Member Institutions and witnessed by H.E. Mr. Sutham Saengpratoom, Minister of University Affairs of Thailand, H.E. Mr. Kiyohiro Araki, Senior Vice-Minister for Foreign Affairs of Japan, Excellencies Minister, Vice-Ministers and representatives from Ministries of Education of ASEAN Countries, Excellencies Ambassadors of ASEAN countries and Japan in Thailand, Dr. Vanchai Sirichana, Chairman of AUN Board of Trustees, Mr. Norihiko Matsumoto, Executive Advisor to the President of JICA, H.E. Mr. Wisber Loeis, Executive Director of the ASEAN Foundation, Dr. Ir. Azmi Mat Akhir, Director of Economic and Functional Cooperation of the ASEAN Secretariat, Assoc. Prof. Dr. Supachai Yavaprabhas, Executive Director of AUN and distinguished delegates and participants from concerning organisations.

The Inception Project

To signify the inauguration of the AUN/SEED-Net, a Comprehensive Support Package comprising the Research Project Support Programme, Support Programme for Academic Seminars, and Graduate Study Programme for Master's Degrees was launched in December 2000 as the Inception Projects. The Secretariat received 122 proposals for Research Projects, 3 for Academic Seminars, and 44 applications for Master's Degree scholarships.

The results of screening by the Secretariat with the input of JICA experts and / or Japanese professors are shown in Table 1.

It should be noted that, out of 21 applicants awarded the Master's Degree scholarships, eleven applicants were from CLMV countries (Cambodia, Myanmar, Lao PDR, and Vietnam), 9 from Indonesia, and 1 from the Philippines. The field of Computer and IT was the most popular one chosen by 7 applicants, followed by Civil Engineering with 6 applicants.

For the Research Project Support Programme, Institut Teknologi Bundung was granted 8 research projects, followed by UGM and CU with 5 and 3 projects awarded, respectively.

Japanese Supporting University Consortium (JSUC)

Since the inception of the AUN/SEED-Net, it has been recognised that the Japanese professors would play an important role in providing technical support and/or guidance for various academic activities which will reinforce the network between the Member Institutions and Japanese universities.

Thus, the Japanese Supporting University Consortium (JSUC) has been set up, which is composed of 11 Japanese universities, of which 7 are national, and 4 are private ones. The consortium is chaired by Prof. Dr. Fumio Nishino from National Graduate Institute for Policy Studies. The Member Universities are (in alphabetical order):

- Hokkaido University
- Keio University
- Kyoto University
- Kyushu University
- National Graduate Institute for Policy Studies
- Shibaura Institute of Technology
- Tokai University
- Tokyo Institute of Technology
- University of Tokyo
- Toyohashi University of Technology
- Waseda University

Table 1: Number of Inception Projects approved

Programme	Number	Source of Funding	
		JICA	AF
Research Project Support Programme	31	25	6
Support Programme for Academic Seminars	3	-	3
Graduate Study Programme for Master's Degree	21	8 [1]	13 [2]

Note: (1) One applicant declined scholarship
(2) Number of scholarships offered (As of June 17, 2002)

Japanese Professor Dispatch Program

In the fiscal year 2001, the AUN/SEED-Net Secretariat invited all Member Institutions, except the ones in Singapore and Brunei Darussalam, to submit requests for the dispatch of Japanese professors to their Institutions for short term visit (1 to 2 weeks). The objective of this Programme is to promote collaboration between Japanese universities and Member Institutions in order to exchange information and identify possible areas for future collaboration along the line set out in the Academic Policy.

The Secretariat received in total 59 requests from 11 Member Institutions. As a result of the screening in consultation with representatives of JSUC, 8 Japanese professors were dispatched to 5 Member Institutions during March to April 2002, namely, 2 to the National University of Laos, 2 to Ho Chi Minh City University of Technology, 1 to Institut Teknologi Bandung, 1 to University of Yangon and 2 to University of Malaya.

Nevertheless, the other requests made for the Fiscal Year 2001 would be considered for dispatch of Japanese Professors to Member Institutions within the first half of fiscal Year 2002 (April-September 2002).

Strategy Paper

During May to September 2001, the AUN/SEED-Net Secretariat and JICA jointly dispatched 10 Preparatory Study Teams consisting of professors from Japanese Supporting University Consortium (JSUC), members of the AUN/SEED-Net Steering Committee, members of the AUN/SEED-Net Secretariat, and officials from relevant organisations, to all the Member Institutions to assist in finalising their Action Plans in preparation for formulating the five-year AUN/SEED-Net Strategic Plan.

The Workshop on "Formulating AUN/SEED-net Strategy and Action Plan of the Member Institutions" was subsequently held in October 2001 to map out a final strategic plan for implementation. Following the keynote speech by Prof. Dr. Fumio Nishino on Project Strategy Recommendations, the Action Plans of Member Institutions were presented, and brainstorming was then conducted in five groups on the following topics: (i) upgrading of abilities of academic staff; (ii) improvement of education standard; (iii) enhancement of research capability; (iv) IT-based teaching materials; and (v) establishment of information, dissemination and communication system.

The outcome of the discussions of each group, guided by the strategic concept proposed by Prof. Dr. Fumio Nishino, led to the final blueprint of the "Strategy Paper" which focuses on: (1) upgrading faculty qualifications through the acquisition of graduate degrees; (2) enhancing graduate programmes of host institutions; and (3) strengthening joint activities and human linkages among Member Institutions (including joint development of IT-enhanced courseware in engineering education). In addition, it was recommended that an effective activity management system and communication network be established to facilitate communication and collaboration among faculty members from Member Institutions and JSUC. This will be implemented through the mechanism of field coordinators for JSUC, and a well designed web-site.

In accordance with the recommendation of the Workshop to allocate scholarships in order to ensure more or less uniform distribution of master's students among the Member Institutions, the Secretariat sent the questionnaire adopted by Group one at the Workshop to each Member Institution. The purpose of the questionnaire was to determine demand (or sending) and supply (or hosting) forecasts for master's and doctoral students in each field of engineering, along with the institution's priorities for the next five years. Based on the responses from Member Institutions, a flexible "quota system" was set out in the Strategy Paper, which may be regarded as the academic policy of the Project.

It is highly hoped that the support of the Japanese Government through JICA and the Japan-ASEAN Solidarity Fund as stipulated in the Cooperative Framework be extended beyond the five-year period of the Project. This can only be made possible by friendly cooperation among Member Institutions and production of quality output through proper monitoring and evaluation conducted both internally through each Member Institution's monitoring mechanism and externally as outlined in the Strategy Paper.

The AUN/SEED-Net Project has been mapped out with "sustainability" in mind. Its success not only relies on supplementary inputs from the Member Institutions, but also on the high spirit of cooperation among them. As a result of discussions during the study missions to the Member Institutions in Singapore, Nanyang Technological University and the National University of Singapore agree on providing annually a few scholarships to "highly qualified" applicants from other Member Institutions, as well as supporting manpower expertise in higher degree research/training or seminars. Implementation of the Project on a cost-sharing basis as elaborated in the Strategy Paper has been well received.

The Strategy Paper was approved in the 2nd Steering Committee Meeting in Institut Teknologi Bundung on January 28-29, 2002. The proceedings of the Workshop and the Strategy Paper were subsequently published.

Contract between ASEAN Foundation and AUN/ SEED-Net Secretariat

On November 21, 2001, Prof. Dr. Panitan Lukkunaprasit, on behalf of the AUN/SEED-Net Secretariat, singed a project contract with H.E. Mr. Wisber Loeis, Executive Director of the ASEAN Foundation for funding support programmes for 6 research projects, 11 Master's Degree scholarships and 5 academic seminars or workshops (including 2 seminars/workshops for AUN/ SEED-Net Special Project).

The amount of the support is US$ 787,160, and the duration of support is 2 years and 8 months.

Activity Plan for the Year 2002

The JICA-AUN/SEED-Net activity plan for the Japanese fiscal year 2002 was prepared by Mr. Kiyoshi Isaka, Chief Advisor for the JICA-AUN/SEED-Net Project. The updated plan is shown in Table 2.

Table 2: Programme Activities Schedule 2002

1. *Graduate Study Programme forMaster's Degree: 50-55 scholarships*
2. *Research Projects Support Programme: 25-30 projects*
3. *Provision of Research Equipment: 4- 5 projects*
4. *Academic Seminars: 5-7 seminars*
5. *Subsidy for Researchers' Particpation in International Conferences: 20-25 researchers*
6. *Dispatch of Japanese Professors: 40-50 professors*
7. *Short-term Study in Japan: 40-50 participants*
8. *Ph.D. Programme in Japan: 4 participants*
9. *Short-term Training within Region: 30-40 participants*
10. *SEED-Net Special Project: 2 workshops*
    - IT-Enhanced Courseware Development Seminar (May 2002)

Graduate Study Programme for Master's Degrees for the Year 2002

In December 2001, the AUN/SEED-Net Secretariat called for submission of applications for Master's Degree scholarships for the Year 2002. As a result, 33 applications were submitted, of which 16 applicants were from CLMV countries, the rest were from Gadja Manda University and De La Salle University with 9 and 8 applicants, respectively. The most preferred Hosting Institutions were National University of Singapore, Nanyang Technological University, and Chulalongkorn University, with 9, 7 and 6 applications, respectively (considering the first priority chosen by the applicants). Electrical & Electronics Engineering was the most popular subject chosen by 13 applicants, followed by Mechanical Engineering and Civil Engineering with 4 applicants each. The details are shown in the Tables 3-5.

Based on the recommendation from the Workshop on Formulating AUN/ SEED-Net Strategy and Action Plan of Member Institutions in October 2001 regarding the uniform distribution among Member Institutions, the Academic Policy was used, in general, as a guideline to allocate hosting institutions in various fields of study.

As of June 17, 2002, 8 applicants were granted AUN/SEED-Net scholarships; 6 were offered scholarships on condition of unconditional admission by the Hosting Institutions; 3 applicants declined to receive the scholarships, and 7 applicants were disqualified. The other 9 applicants either were under consideration of the Hosting Institutions, or applied for the second semester, and would be considered by the Secretariat in due course.

Unifying the Contract Format Regarding Intellectual Property Rights

The clauses on the Intellectual Property Rights (IPR) as appearing in the AUN/SEED-Net contract were acceptable by most Member Institutions. However, some Member Institutions did not agree on the content. To settle the IPR matter, it was brought to the AUN/SEED-Net Second Steering Committee Meeting on January 28-29, 2002 at Institut Teknologi Bandung, Indonesia for consideration. The Meeting agreed to accept, in principle, the following new policy in relation to IPR for JICA-AUN/SEED-Net Project:
(i) that rights and ownership to all intellectual properties generated by the Project shall be vested on Member Institution(s) involved. However, JICA and other Member Institutions had rights to freely use these IPR for academic and network purposes;
(ii) that Member Institutions were expected to positively contribute on a voluntary basis a part of income generated by the IPR which resulted from the AUN/SEED-Net funding, to the AUN/SEED-Net Secretariat.

Table 3: Sending and Hosting Institutions from applicants' top two priorities

SENDING INSTITUTION			No. of App.	HOSTING INSTITUTIONS								SUM
				Indonesia	Malaysia		Philippines	Singapore		Thailand		
				UGM	USM	UM	UP	NTU	NUS	CU	KMITL	
	Cambodia	ITC	2					1	1	2		4
	Indonesia	UGM	9			1	1	9	3	1		15
	Lao PDR	NUL	4		1			2	2	2		7
	Myanmar	YTU	2					1	1		2	4
		UY	1						1	1		2
	Philippines	DLSU	8					6	5	2	3	16
	Vietnam	HUT	2							2	1	3
		HMCUT	5	2	1		1			1		5
	SUM		33	2	2	1	2	19	13	11	6	56

Table 4: Popularity ranking of hosting institutions based on applicants' top two priorities

Rank	Institutions	No. of 1st priority	No. of 1st & 2nd priorities
1	NUS	9	13
2	NTU	7	19
3	CU	6	11
4	KMITL	5	6
5	USM	2	2
6	UP	2	2
7	UGM	2	2
8	UM	-	1
	Total	33	56

Table 5: Popularity of subjects based on applicants' top priority

Rank	Subject	No. of Applicant
1	Electrical & Electronics	13
2	Mechanical	4
	Civil	4
3	Computing	3
	Chemical	3
4	Environmental	2
5	Telecommunication	1
	Geological	1
	Industrial	1
	Metallurgical	1
	Total	33

AUN/SEED–Net Special Project – "IT–Enhanced Courseware Development"

The power and impact of IT on education has been well recognised among members of the Network. As H.E. Mr. Kiyohiro Araki, Senior Vice-Minister for Foreign Affairs of Japan pointed out in his speech in the Inauguration Ceremony of AUN/SEED-Net, the SEED-Net's activities would reinforce human networks in real world by maximising Information Technology and by contributing to the establishment of relations among ASEAN member countries as well as between ASEAN and Japan. In the same event, Prof. Dr. Panitan Lukkunaprasit, Executive Director of AUN/SEED-Net Secretariat, also mentioned that mo- dern Information Technology would be necessary for economical and efficient communication, sharing of information and courseware among all universities involved in the project. In particular, Prof. Dr. Djoko Suharto proposed a project called "Intelligent Server Regional Education (ISREE)" in the First Steering Committee Meeting in Bangkok on April 24, 2001. Subsequently in the Workshop on "Formulating AUN/SEED-Net Strategy and Action Plans of Member Institutions" in October 2001, the project was streamlined to IT-enhanced courseware development, and it was endorsed as an AUN/SEED-Net special project with an objective of encouraging the development and use of IT-enhanced courseware for engineering education. An outline of the Project was formulated with proposed activities identified together with tentative action plans (See "Proceedings of the Workshop on Formulating AUN/SEED-Net Strategy and Action Plans of Member Institutions" for details).

In accordance with the action plan, the first IT Seminar on "Using Information Technology to Enhance Engineering Education" was held from 16 to 17 May 2002 at Nanyang Technological University (NTU) and National University of Singapore (NUS), with the aims to familiarise key decision makers of the Member Institutions with various ways of using IT to enhance engineering

education; to outline the strategy on jointly creating and sharing IT-enhanced course- ware; and to explore the tentative policy towards IT- enhanced education.

The Seminar was attended by 34 participants from the Member Institutions, the Japanese Supporting University Consortium (JSUC), the AUN/SEED-Net Secretariat, the JICA-AUN/SEED-Net Project, and the JICA Singapore Office. As a result of the presentations and the discussions, the IT Seminar Resolutions were adopted (Appendix 1).

It was agreed that the main activity of AUN/SEED-Net concerning IT would be to encourage Member Institutions to either jointly or independently develop inexpensive and user-friendly courseware development software tools, and familiarise teaching staff with hardware independent IT-enhanced courseware and encourage them to develop such materials. Such joint effort as well as sharing of IT-enhanced courseware would contribute to accomplishment of the objectives set forth in the "Cooperative Framework".

The IT Committee, approved for set up in the Second AUN/SEED-Net Steering Committee Meeting, was recommended to consist of 22 members with one representative from each Member Institution, a representative from JSUC, a representative from AUN/SEED-Net Secretariat and a representative from JICA-AUN/SEED-Net Project. It was also recommended that the Chairman of the IT Committee be Prof. E.G. Atanacio from the University of the Philippines, the Co-Chairman be Prof. Viboon Sangveraphunsiri from Chulalongkorn University, and that the other members be nominated by the representatives of respective institutions.

The main tasks of the IT Committee are to assist the Member Institutions in improving their capabilities to use IT in enhancing engineering education; to facilitate evaluation of the IT-enhanced courseware developed; and to organise IT Seminars in collaboration with the AUN/SEED-Net Secretariat to promote improvement in IT-enhanced courseware development.

JICA Supporting Programmes for AUN/SEED-Net for the Fiscal Year 2002

The JICA Supporting Programmes, namely Short-Term Study Programme in Japan, Ph.D. Programme in Japan, and Japanese Professors Dispatch Programme, are directly managed by JICA Project for AUN/SEED-Net in close collaboration with the Secretariat. These Projects aim to enhance regional cooperation programs among the Member Institutions. The details are as follows:

1. Short-Term Study Programme in Japan

In the fiscal Year 2002, AUN/SEED-Net plans to implement the Short-Term Study Program in two types with the estimated 40-50 participants.

Type I: Participants are expected to exchange views and opinions with field coordinators for about 2 weeks in Japan regarding ways and means to enhance AUN/SEED-Net activities and to strengthen the relationship between the Member Institutions and Japanese universities for promoting the future collaboration. Expected participants are the responsible Dean and/or Head of Department/Research Unit of priority fields of Member Institutions who are in charge of AUN/SEED-Net activities.

Type II: Research and teaching staff of Member Institutions are given an opportunity to study at Japanese universities around 1-6 months, aiming at enhancing research and education in engineering in Member Institutions. Japanese professors provide guidance to participants in conducting research on a specific area of engineering.

2. Ph.D. Programme in Japan

To enhance higher education in engineering for Member Institutions of the AUN/SEED-Net, the Programme of Ph.D. in Japan provides an opportunity for research and teaching staff of Member Institutions to acquire a doctoral degree at universities in Japan.

For the fiscal Year 2002, there are 4 Member Institutions, namely UM, USM, ITB (INA), and UP, participating in this Programme. Other universities will be allocated in the following years by taking into consideration the balance among Member Institutions.

3. Japanese Professors Dispatch Programme

For the fiscal Year 2002, 40-50 Japanese professors are targeted to be dispatched. The AUN/SEED-Net Secretariat already considered the requests from Member Institutions submitted in Year 2001 in the first half of the year. Furthermore, the requests for dispatch of Japanese professors for the second half of the year (October 2002 – March 2003) were invited until the end of June 2002.

Visits of Japanese Officials

The Secretariat was honoured to welcome the visits of Japanese officials as follows:

Mr. Eiji Inui, Director of First Social Development Cooperation Division, on December 14, 2001.

Mr. Hiroaki Nakagawa, Director of Planning Division, Social Development Cooperation Department on May 21, 2002

On both occasions, the progress of the implementation of AUN/SEED-Net projects was reported.

A Japanese Study Team on International Cooperation for Higher Education paid a visit to the Secretariat on June 6, 2002. The Team comprised of

- ▸ Mr. Isao Kiso, Director of International Affairs Division,
- ▸ Mr. Yasuhisa Kaneguchi, Director of Lifelong Learning Promotion Division,
- ▸ Mr. Masahide Kuriyama, Director of Private Education Institution Aid Division,
- ▸ Mr. Mitsuru Tanaka, Director of Student Exchange Planning Division from Ministry of Education, Culture, Sports, Science and Technology,
- ▸ Ms. Kawanura Maki, First Southeast Asia Division,
- ▸ Mr. Toshiya Naito, First Secretary, Japanese Embassy

The Team took a brief visit to the Academic Resources Center of Chulalongkorn University where they observed an actual video conferencing taking place between the Global Development Learning Network (GDLN) at Chulalongkorn University and other networks in the region. They were greeted by Dr. Kamales Santivejkul, Director of the Centre of Academic Resources.

A meeting was subsequently held in Room 211 at Jamjuree 4 Building, Chulalongkorn University. The evolution, objectives and progress of implementation of the AUN/SEED-Net Project were reported by Prof. Dr. Panitan Lukkunaprasit and Mr. Isaka. On this occasion Assoc. Prof. Dr. Tatchai Sumitra, President of Chulalongkorn University hosted a luncheon for the visitors.

Visit of an executive from the ASEAN Foundation

On May 8, 2002, the Secretariat was honoured to welcome Mr. Koichi Funayama, who would assume the position of Chief Coordination Officer to the ASEAN Foundation starting from May 19, 2002. The progress of the support programmes funded by AF was reported. In particular, it was noted that 5 students had already studied at KMITL, and 4 students were about to start their first semester at Chulalongkorn University in June 2002. Prof. Dr. Panitan Lukkunaprasit acknowledged with appreciation the support of AF, and also mentioned that the AUN/SEED-Net Project wished to request for additional support from AF in the future.

Construction of AUN/ SEED-Net Web Site

Since March 2002, AUN/SEED-Net has commissioned Samart Internet Company Limited to develop the AUN/SEED-Net Web Site as an information dissemination system and communication network in order to facilitate communication and collaboration among faculty members from Member Institutions and Japanese universities. The Web-Site would also feature a database of academics and a bulletin board system, among others, and it was targeted to be operational (in the initial trial phase) by the end of June 2002.

Collaboration with ASEAN Committee on Science & Technology (COST)

In the 2nd Steering Committee Meeting, Dr. Ir. Azmi Mat Akhir, Director of Bureau of Economic and Functional Cooperation of the ASEAN Secretariat and member of the AUN/SEED-Net Steering Committee, proposed that AUN/SEED-Net consider possible collaboration with the ASEAN Committee on Science & Technology (COST) on the ASEAN Virtual University of Science and Technology (AVUST) Project. The Meeting welcomed any future collaborative efforts between the AUN/SEED-Net and the AVUST, when the former has firmed up its programmes and activities in appropriate areas. Representatives from AVUST are welcomed to participate, at their own expenses, in future AUN/SEED-Net Workshops on IT-enhanced courseware development.

IT SEMINAR RESOLUTIONS

The first IT Seminar on "Using Information Technology to Enhance Engineering Education" was held from 16 to 17 May 2002 at Nanyang Technological University (NTU) and National University of Singapore (NUS) as a part of the activities of the ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net). The Seminar was jointly organized by NTU, NUS and AUN/SEED-Net. It was supported by the Japan International Cooperation Agency (JICA) through the JICA-AUN/SEED-Net Project.

The number of participants was 34, representing the Member Institutions of AUN/SEED-Net, Japanese Supporting University Consortium (JSUC), AUN/SEED-Net Secretariat, JICA-AUN/SEED-Net Project, and JICA Singapore Office. The list of participants is given in Annex 1.

The objectives of the Seminar were (1) to familiarize key decision makers of Member Institutions of AUN/SEED-Net with various ways of using IT to enhance engineering education; (2) to come up with the strategy of AUN/SEED-Net on jointly creating and sharing IT-enhanced courseware in order to accomplish an objective of AUN/SEED-Net stipulated in the Cooperative Framework "... to effectively utilizing regionally available human resources for upgrading higher engineering education ... not only advancing academic cooperation among themselves on an equal footing ... but also for providing educational and technical assistance to less advanced engineering institutions in the region, where appropriate"; and (3) to explore the tentative policy towards IT-enhanced education and set up of the IT Committee.

The following resolutions were adopted:

1. It was recognized in the Seminar that well-designed IT-enhanced courseware would greatly supplement traditional teaching methods since these courseware would furnish much more flexible utilization by students and interactivity between lecturers and students, which would improve the effectiveness and efficiency of the learning process, provide ample opportunity for discussions among lecturers and students.

2. It was agreed that the main targets of IT components of AUN/SEED-Net activities would be to encourage Member Institutions to either jointly or independently develop inexpensive and user-friendly courseware development software tools, and familiarize teaching staff of Member Institutions with hardware independent IT-enhanced courseware and encourage them to develop such materials. The JICA-AUN/SEED-Net Project agreed to support and stimulate such activity in various means. It was also agreed that the intellectual property rights (IPR) of courseware would belong to their creators and could be freely used by Member Institutions for academic purposes. It was recommended that each Member Institution would report the total number of courseware created to the AUN/SEED-Net Secretariat for monitoring, and each Member Institution would identify the best practice in their use based on a set criteria, taking into consideration the latest development in understanding how students learn.

3. It was agreed that Member Institutions of the AUN/SEED-Net would propose projects to develop IT-enhanced courseware to the AUN/SEED-Net Secretariat to be shared among Member Institutions so that such joint effort would accomplish the said objective of the AUN/SEED-Net stipulated in the Cooperative Framework.

4. It was recommended that the IT Committee approved for creation in the Second AUN/SEED-Net Steering Committee Meeting held in January 2002 be formed in the next Steering Committee Meeting. The IT Committee was recommended to consist of 22 members with one representative from each Member Institution, a representative from JSUC, a representative from AUN/SEED-Net Secretariat and a representative from JICA-AUN/SEED-Net Project. It was also recommended that the Chairman of the IT Committee be Prof. E.G. Atanacio from the University of the Philippines, the Co-Chairman be Prof. Viboon Sangveraphunsiri from Chulalongkorn University, and that the other members' names be nominated by the representatives of respective institutions.

5. It was agreed that the main task of the IT Committee would be to assist the Member Institutions in improving their capabilities to use IT in enhancing engineering education. The Committee would meet to evaluate the IT-enhanced courseware and facilitate exchange of ideas and experiences for further improvement. The IT Committee would hold e-meetings as often as required. The IT Seminars to be organized by the IT Committee in collaboration with the AUN/SEED-Net Secretariat might be held once or twice a year to share IT-enhanced courseware and to discuss ways to improve the methods of their development and the effectiveness in their use.

6. Finally, the participants expressed their appreciation to NTU, NUS, AUN/SEED-Net, JSUC, and JICA.

Appendix 2: List of Graduate Study for Master's degree Support Program under Inception Projects

No.	Name	Sending University	Field of Study	Host University	Commencement Date	Contract Status	Source of Fund
1	Arief Setiawan Budi Nugroho	UGM	Civil Engineering	NUS	N/A	No	JICA
2	Agnes D Galang	DLSU	Civil Engineering	NUS	Jan.,02	Yes	JICA
3	Jayan Sentanuhady	UGM	Mechanical and Production Engineering	NTU	Apr., 02	Decline	JICA
4	Nopriadi	UGM	Mechanical and Production Engineering	NTU	Jul., 02	Yes	JICA
5	Sri Widiastuti	UGM	Civil and Structural Engineering	NTU	Jul., 02	Yes	JICA
6	I Gde Budi Indrawan	UGM	Civil and Structural Engineering	NTU	Jul., 02	Yes	JICA
7	Bimo Sunarfriliantono	UGM	Electric and Electronics Engineering	NTU	Jul., 02	Yes	JICA
8	Faridah	UGM	Electric and Electronics Engineering	NTU	Jul., 02	Yes	JICA
9	Tha Bounthanh	NUOL	Computer Engineering	KMITL	Nov., 01	Yes	AF
10	Khampheth Bounnady	NUOL	Computer Engineering	KMITL	Nov., 01	Yes	AF
11	Kham Khanthavivone	NUOL	Telecommunication Engineering	KMITL	Nov., 01	Yes	AF
12	Khamphong Khongsomboun	NUOL	Telecommunication Engineering	KMITL	Nov., 01	Yes	AF
13	Somphone Kanthavong	NUOL	Information Technology	KMITL	Nov., 01	Yes	AF
14	Nouanchanh Panyanouvong	NUOL	Information Technology	KMITL	Nov., 01	Yes	AF
15	Zay Yar Min San	YTU	Information Technology	KMITL	Jun., 02	Yes	AF
16	Win Thet Maung	YTU	Information Technology	KMITL	N/A	Yes	AF
17	Wahyu Wilopo	UGM	Water Resources	CU	Jun., 02	Yes	AF
18	Endah Dewi Nurahmani	UGM	Petroleum Engineering	CU	Jun., 02	Yes	AF
19	Nguyen Thi Thu Ha	HUT	Biotechnology and Food Engineering	CU	Jun., 02	Yes	AF
20	Soe Thein	UY	Servey Engineering	CU	Jun., 02	Yes	AF
21	Aung Cho Nyunt	UY	Electronic Engineering	CU	N/A	Yes	AF

Appendix 3: List of Research Project Support Program under Inception Projects

No.	University	Field	Project Title	Duration	Budget (US$)	Source of Fund	Status
1	ITB(BRU)	CE	To Develop Lightweight Foam Concrete Sturctural Elements for the Construction of Low Energy Houses in the Kampong (Water Village) of Brunei Darussalam	Jan.-Oct., 02	35,000.00	AF	Budget's been remitted, US$ 7,000
2	ITC	CE	Determining the Strength Standard of Timbers in Cambodia	Jan.02 - Mar., 03	10,000.00	JICA	Budget's been fully remitted, US$10,000
3	ITC	CE	Computerized Mapping and G.I.S. Database on Water-related Issues	Jan.02-Jun.02	9,892.00	JICA	Budget's been remitted, US$6,191
4	ITB(INA)	CH	Development of Ethanol-Fermentation Process for the Utilization of Oil - Palm Empty Fruit Bunches	Jan. - Dec., 02	10,000.00	JICA	Budget's been remitted, US$ 3,000
5	ITB(INA)	ME	Buckling Behavior of Stiffened Panel Repaired with Glare Patch	Jan. - Dec., 02	25,000.00	JICA	Budget's been remeitted, US$ 9,135
6	ITB(INA)	ME	Use of LPG to Obtain Cleaner Fuel for the Environmnet and to Control Knock in Spark Ignition Engines	Jan. - Dec., 02	24,910.00	JICA	Budget's been remitted, US$ 11,986
7	ITB(INA)	EEI	Doping of GaN and AIGaN by Plasma Assisted MOCVD and its application to Photodiode and FET	Jan., 02 - Dec., 03	25,000.00	JICA	Budget's been remitted, US$ 7,205
8	ITB(INA)	ME	Improved Behavior of Seismic Resistant Steel Braced Frames	Jan. - Dec., 02	9,900.00	JICA	Budget's been remitted, US$ 2,023
9	ITB(INA)	ME	Energy Absorption Capacity of structural components under Reversed Cyclic Loading	Jan. - Dec., 02	24,900.00	JICA	Budget's been remitted, US$ 4,275
10	ITB(INA)	EEI	Development of 3-D Surface Profile Measurement Techniques	Jan., 02 - Dec., 03	24,000.00	JICA	Budget's been remitted, US$ 3,150
11	ITB(INA)	CE	Analogue Modeling of Tectonic Processes	Jan. - Dec., 02	9,997.00	JICA	Budget's been remitted, US$4,372
12	UGM	CE	Numerical Model Development of Swarm Bubble Kinematic and Oxygen Exchange in Aeration Tanks	Jan. - Dec., 02	24,410.00	JICA	Budget's been remitted, US$ 7,229
13	UGM	CE	Lithium Aluminium Silicate (LAS) Glass Ceramics from Used Zeolite disposal	Jan. - Oct., 02	10,000.00	JICA	Budget's been remitted, US$ 3,980
14	UGM		Utilization of Ash Waste from Coal Fired Electric Power Plants to Produce Artificial Light Weight Aggragates	Jan. - Oct., 02	10,000.00	JICA	Budget's been remitted, US$ 2,755
15	UGM	CE	Integrated Water Resources Management in Merapi-Yogyakarta Basins	Jan. - Aug., 02	24,992.00	JICA	Budget's been remitted, US$14,968
16	UGM	CE	Estimating Future Needs of Transportation Infrastructure and Services in the Southeast Asian Region	Jun.02-Mar.03	35,000.00	AF	Contract to be signed by UGM
17	NOUL	EEI	Wave Propagation According to Meteorogical Aspects in Lao PDR	Jan. - Dec., 02	24,984.00	JICA	Budget's been remitted, US$12,379
18	UM	EEI	Analysis and Design of an Active Power Filter Control Circuit	N/A	N/A	JICA	Contract to be signed during 3rd SCM
19	USM	EEI	To Study the Effect of Rain, TEC, Magnetic Storm and Weather on Satellite Link	Jan. 02 - Dec., 02	30,000.00	AF	Budget's been remitted, US$ 5,910
20	USM	CH	Flue Gas Desulfurization with Absorbent Utilizing Waste Material	Jan. 02 - Dec., 03	10,000.00	JICA	Budget's been remitted, US$ 4,000
21	USM	ME	Biomass Gasification / Combustion System for Rural Electrification	Jan. 02 - Dec., 03	25,000.00	JICA	Budget's been remitted, US$ 4,000
22	DLSU	EEI	E-Commerce Virtual Center for DLSU College of Engineering	Jan. - Dec., 02	10,000.00	JICA	Budget's been remitted, US$ 5, 350
23	UP	CE	Seismic Response Analyses of Horizontally Layered Soli Deposits in Metro Manila	N/A	N/A	JICA	Considering
24	UP	CE	Development of Flowable Self-Compacting Concrete for Tropical (Hot-Weather) Environment	N/A	N/A	JICA	Considering

No.	University	Field	Project Title	Duration	Budget (US$)	Souce of Fund	Status
25	NTU	EEI	FPGA Implementation of MELP Encoder/Decoder	Jan. - Dec., 02	7,000.00	AF	Budget's been remitted, US$2,600
26	BUU	EEI	Production Related Information System Concept	N/A	N/A	JICA	Postpone to next fiscal year (2002)
27	CU	EEI	Analysis and Design of Optical Fiber and Photonic Devices	N/A	N/A	JICA	Contract to be signed by CU
28	CU	ME	Effects of Ethanol Contents on Diesohol Compression Ignition Engine Combustion and Emissions	N/A	N/A	AF	Contract to be signed by CU
29	CU	CE	Finite Element Analysis of Reinforced Concrete Slab Panels Strengthened with FRP Sheets	N/A	N/A	JICA	Contract to be signed by CU
30	HUT	EEI	Fabrication and Characterization of High-Tc Superconducting Thin Films	Jan., 02 - Dec., 03	30,000.00	AF	Budget's been remitted, US$ 4,000
31	HCMUT	EEI	Application of Near Infrared Low Power Semiconductor Laser in Treatment of Hemiplegia due to Cerebrovascular Accident (Strokes)	April 02 - Mar., 04	10,000.00	JICA	Budget's been remitted, US$6,000

Appendix 4: List of Academic Seminar Project Support Program under Inception Projects

No.	Title of Seminar	Host University	Period	Status	Remark
1	Telecommunications and Information Technology Challenges Facing for Global competition on the 21the Century	KMITL, Thailand	To be considered	Waiting for the confirmation from KMITL regarding the time to organize the seminar	
2	The Experimental & Theoretical Mechanics 2002	ITB(INA), Indonesia	March 18-19,02	Contract has already been signed and budget was fully remitted on Jan 16,2002	Seminar done
3	Effects of Long-Distance Earthquakes -full-scale Building Response Measurements	NTU, Singapore	To be considered	Under consideration	

Appendix 5: List of Graduate Study for Master's degree Support Program for the Year 2002

(As of June 17, 2002)

No.	Name	Sending University	Field of Study	Host University	Commencement Date	Scholarship Stutus
1	Mr. Kimtho Po	ITC	Telecommunication System	CU	June-02	Confirmed
2	Mr. Muhammad Nur Rizal Masduq	UGM	Computer Engineering	CU	November-02	On Hold
3	Mr. Wawan Budianta	UGM	Environmental Engineering	UP	June-02	Confirmed
4	Mr. Eka Firmansyah	UGM	Electronics & Electrical Engineering	NTU	N/A	Note 1
5	Mr. Thong Sopha	NUL	Structural / Civil Engineering	NTU	N/A	Note 2
6	Mr. Vansay Meksarik	NUL	Power Engineering	USM	July-02	Confirmed
7	Mr. Thong Vanh Vilayphonh	NUL	Mechanical Engineering	NUS	July-02	Note 4
8	Ms. Nwe Nwe Aung	UY	Environmental Engineering	CU	2002	Confirmed
9	Mr. Tristan Roland Punzalan	DLSU	Electrical & Computer Engineering	CU	June-02	Confirmed
10	Mr. Angelo Sumayao	DLSU	Electronics & Electrical Engineering	NTU	June-04	Note 3
11	Ms. Marie Therese Quieta	DLSU	Electrical & Computer Engineering	NUS	June-04	Note 4
12	Mr. Marlon Musngi	DLSU	Electrical Engineering	NTU	N/A	Note 4
13	Mr. Huy Tran Duc	HUT	Metallurgical Engineering	CU	June-02	Confirmed
14	Mr. Xuan Thang Cao	HUT	Chemical Engineering	CU	June-02	Confirmed

Note 1: To be interviewed and tested for English and Technical Proficiency

Note 2: To be approved by the Board of Graduate Studies

Note 3: To send application to NTU and to be interviewed and tested for English and Technical Proficiency

Note 4: Offered scholarships provided that unconditional acceptance by hosting institution is offered