The Renewal of AEESEAP and Future Plans

Hajime Fujita

Vice President, AEESEAP
Professor, Research Institute of Science, Nihon University
1-8 Kanda Surugadai, Chiyoda-ku, Tokyo 101-8308 Japan
fujita@mech.cst.nihon-u.ac.jp

Abstract

AEESEAP is the acronym for the Association for Engineering Education in Southeast and East Asia and the Pacific. The Association was formed in 1973 with the support of UNESCO. During the 36 years of development, however, the economic situation drastically changed among the member countries and AEESEAP must seek for new approach to achieve the aims and goals established at the beginning. The Executive Meeting held in Tokyo in 2008 was a turning point to adjust the AEESEAP activities to cope with new development. This paper describes the historical review and possible future activities of AEESEAP.

Keywords: Engineering Education, Asia, Pacific, AEESEA, Washington Accord, Accreditation

1. Foundation and historical development of AEESEAP

The historical review and future plans in order to cope with the new situation have been well described by former presidents of AEESEAP, Nasrudin Abdul Rahim [1] and R. M. Hodgson [2]. This paper will describe the most recent development of AEESEAP, in addition to what has been said by the former presidents.

AEESEAP was founded as the outcome of a UNESCO regional seminar on New Approaches to Engineering Education in Asia held in Kuala Lumpur in March 1970. During the seminar it was recommended that a permanent organization for engineering education for the South East Asian region should be formed. Subsequent action by UNESCO and the World Federation of Engineering Organizations (WFEO) led to the formation of AEESEA, the Association for Engineering Education in South East Asia.

The inaugural meeting of AEESEA was held at the College of Engineering, University of the Philippines in Manila during October, 1973 in conjunction with the UNESCO regional seminar on Education, Industry Cooperation and Training. In the Executive meeting held in Seoul in 2001, this organization changed its name to the Association for Engineering Education in Southeast and East Asia and the Pacific with the acronym AEESEAP, to better represent the region occupied by the member countries. The change of name became retroactively effective as of 1989.

During the 36 years of AEESEAP history, there was rapid industrialization and surge of prosperity of several AEESEAP nations. The development was, however unfortunately not uniform and we must have new approach to attain the aims and objectives set at the establishment of AEESEAP.

2. Aims and objectives of AEESEAP

To effectively promote technological and engineering development within the Southeast and East Asia and the Pacific, an association seeks to meet the demand for enhancement of engineering competencies within the region, by way of (i) supporting the economic development for the welfare enhancement of the people within the region; (ii) establishing a networking between and amongst the engineering education institutions, industry and relevant organization; and (iii) promoting development of technology and engineering education system.

The aims and objectives of AEESEAP are as follows:

- To promote an awareness of the need and role of engineering, including technicians, education and training and for systematic research on curricula development.
- To facilitate and stimulate regional cooperation in education and training of engineering personal and to promote external assistance programs designed to assist in this.
- To identify problem in engineering education and training within the region and to assist in finding solutions through the exchange of information and personal.
- To provide services aimed at assisting the improvement of the quality of engineering education and the establishment of new facilities for engineering and technological education in the region.
3. The Membership of AEESEAP

AEESEAP has a comprehensive range of membership class such as Voting Members, Ordinary Members, Individual Members and Corporate Members, etc. Among them the voting members are the key to the operation of the Association, as they form the AEESEAP executive committee. It must be noted that the voting members are institutions representing member countries and not individuals. The activities of AEESEAP are regulated by a secretariat, which is rotated between the voting member countries every 3 years. Currently, there are 15 voting members of the AEESEAP from the following member countries: Australia, Brunei Darussalam, China, Fiji, Indonesia, Japan, Korea, Lao PDR, Malaysia, New Zealand, Papua New Guinea, The Philippines, Singapore, Thailand and Vietnam.

4. Conferences since 2000

The themes and the statistics of the AEESEAP international conferences are shown in Table 1. Some of the statistics are estimated numbers. The main conferences are held in every three years as The Triennial Conference, with Mid-term Conferences in between years.

Table 1. AEESEAP Conferences since 2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Theme</th>
<th>Place</th>
<th>Papers</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Mid-term</td>
<td>Globalization of Engineering Education Accreditation and Assessment</td>
<td>Seoul, Korea</td>
<td>32</td>
<td>20 International 60 National</td>
</tr>
<tr>
<td>2002</td>
<td>International Seminar</td>
<td>ICT in the Knowledge Society: Challenges and Opportunities for Business and Education</td>
<td>Batam Isl. Indonesia</td>
<td>42+ Keynote</td>
<td>34 International 101 National</td>
</tr>
</tbody>
</table>

Note: The numbers relate to registered participants. The seminar coincided with the bombing of tourist facilities in Bali and in the uncertain circumstances the actual attendance was reduced by an estimated 40%.

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Theme</th>
<th>Place</th>
<th>Papers</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Regional Symposium</td>
<td>Engineering a Better Environment for Mankind</td>
<td>K. L. Malaysia</td>
<td>136</td>
<td>17 International 60 National</td>
</tr>
<tr>
<td>2007</td>
<td>Mid-term</td>
<td>New Strategies in Engineering Education</td>
<td>K. L. Malaysia</td>
<td>56</td>
<td>20 International 60 National</td>
</tr>
<tr>
<td>2008</td>
<td>Executive Committee</td>
<td>(Voting members presented Country Reports.)</td>
<td>Tokyo, Japan</td>
<td>11</td>
<td>14 International 5 National</td>
</tr>
</tbody>
</table>

5. Executive committee meeting in Tokyo 2008

As shown in Table 1, the conference activities were fairly active recently. At each conferences described above, the AEESEAP executive committee meetings were held. Unfortunately however, only minimum quorum of voting members attended at each meeting. At the 2007 executive meeting, representatives from Brunei, China, Japan, Malaysia and New Zealand resolved to attempt to restore the AEESEAP to full activity. R. M. Hodgson, President of AEESEAP at that time decided to have an executive committee meeting with substantial attendance to restore the full activity and JSEE (Japanese Society for Engineering Education) and Nihon University in Tokyo provided assistance and meeting location arrangements.

The meeting was held on September 2-3, 2008 at the campus of College of Science and Technology, Nihon University, Tokyo. Eleven voting members out of 15 have attended the meeting. There was no response from Indonesia, Lao, Thailand and Vietnam. UNESCO Jakarta office was interested in the meeting but could not attend. The first day was devoted to the country reports and it was opened to the ordinary members in Japan. The executive Committee Meeting was held in the morning of September 3.

During the meeting, possible futures for the Association were discussed. The main issues raised were as follows.
1. To help joining the Washington Accord  
   As the economic situation of the nations among the member countries of AEESEAP changed drastically, a corresponding change occurred in engineering education and accreditation systems. The accreditation system for four years engineering education, the Washington Accord, was signed in 1989.  
   The Washington Accord is an international agreement among bodies responsible for accrediting systems engineering degree programs. It recognizes the substantial equivalency of programs accredited by those bodies and recommends that graduates of programs accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering [3].  
   The following AEESEAP member countries have been approved as full signatory member, Australia (1989), New Zealand (1989), Japan (2005), Singapore (2006), Korea (2007) and Malaysia (2009). The request for assisting to develop OBE, Outcome Based Education systems, was made by Brunei Darussalam, Fiji, Papua New Guinea and The Philippines.

   To implement OBE and to meet Washington Accord requirements, the following activities were suggested;  
   a) Workshop to share the experiences.  
   b) Cost sharing (travel cost equalization).  
   c) Other accreditation support (journey to accreditation).

   Problems to meet the requirement of Washington Accord were recognized as follows.  
   a) The very different scale of problems based on population, a population ratio between the largest (China) to the smallest (Brunei) to be excess of 3000 to 1.  
   b) Small countries such as Brunei, Fiji and PNG will have great difficulty setting up an accreditation system.  
   c) The Washington Accord to be approached on the agreed concerns including those related to the development of accreditation systems for small countries with a single engineering school.

2. Assisting establishment of national association  
   If the future of AEESEAP is an Association of Engineering education Associations, AEESEAP should act in place of national association and should assist with the development of national association where appropriate.

3. Approach to UNESCO  
   AEESEAP was formed by strong support of UNESCO. Recently, however, UNESCO support gradually diminished due to the lack of their budget. UNESCO to be asked via both national and international offices, to provide support with the cost of academics visiting to provide assistance, and cost of travels attending meetings.

4. AEESEAP Journal  
   The AEESEAP Journal was published under the editorial management helmed at the Faculty of Engineering, University of Malaysia. The maiden edition published under the Malaysia Secretariat was launched in November 2005 [1].

   Unfortunately, no further issues of the journal have been published since January 2007. There was support for cancelling the future publication of the printed journal, but to periodically publish a set of outstanding papers from the conferences as a web-based publication.

5. Website  
   A website should be established soon and be administered by the secretariat, including support to the Executive activities.

6. Executive  
   Prof. Gao Hong (Tsinghua University, China) was elected as President.  
   Prof. Hajime Fujita (Nihon University, Japan) was elected as the 1st Vice President.  
   Prof. Zhou Yuanjiang (Tsinghua University, China) was declared as Secretary General.  
   The 2nd Vice President was left open.

6. Recent development and future plan  
1. Conference in 2009  
   Consideration was given to other international conferences happening in mid-year 2009 in order to choose the conference site. It was decided that the conference to be held just after the ICEE/ICEER 2009 Korea in Seoul.  
   The 19th AEESEAP Executive Meeting and the Workshop will be held in Seoul, Korea, August 28-29, 2009. It will be organized by AEESEAP and co-organized by KSEE (Korean Society for Engineering Education). The workshop will be held on the afternoon of August 28 and will focus on the collaboration between universities and industry.  
   It is encouraging that UNESCO representative in Jakarta office confirmed to attend the meeting, offering help to restore the relation between those countries without response. ASEE (American Society for Engineering Education) is also planning to resume their membership in AEESEAP.
2. Website
   New website was established at the present secretariat.
   (http://www.aecesap.cacee.org.cn)

3. Future plan
   The future direction proposed by Hodgson in 2007 [2] is still effective. The future role of AEESEAP may be to act as a regional forum for national engineering societies and as a source of advice and expertise to nations as they seek to develop engineering education and the related accreditation systems. Practical plans such as helping to join the Washington Accord are to be discussed in 2009 Executive meeting.

7. Concluding remarks
   Historical development, recent activities and future directions of AEESEAP are described. The aims and objective of the Association remain as valid as they were when first formulated. The outline of the future direction was formulated in 2008 Executive meeting in Tokyo and the practical plans are to be discussed in 2009 Executive meeting to be held in Seoul in August 28-29, 2009.

Acknowledgement
   Thanks are due to Bob Hodgson, former President for the President’s report submitted after the 2008 Tokyo meeting and to Roger Hadgraft who prepared the minutes of the 2008 Executive meeting in Tokyo. This report is partly based on the President’s report and the minutes of 2008 Tokyo Executive meeting.

References
2. R M Hodgson, The aims and goals and the past present and future activities of AEESEAP, Proceedings of the International Session, 55th Annual Conference of JSEE, August, 2007, Tokyo, Japan

Biography
   Dr. Hajime Fujita received B.E. and M. E. degrees from the Department of Mechanical Engineering, Nihon University in 1965 and 1967 respectively, and received Ph. D degree from The Johns Hopkins University in 1971. After serving as a Post Doctoral Fellow at JHU and a Visiting Assistant Professor at the Illinois Institute of Technology, he returned to Japan in 1975 and worked at the Mechanical Engineering Research Laboratory, Hitachi, Ltd., serving as a Senior Scientist and a Chief Scientist, mainly engaged with the aerodynamic noise control, as well as in-house CEE among Hitachi Group companies. He was appointed as an East Japan Railway Professor at the Tokyo Institute of Technology from October 1992 to March 1995. He was appointed as a Professor at the Department of Mechanical Engineering, Nihon University in April 1995 and served until March 2008 when he retired. He was elected as the Director for International Affairs of JSEE in 2000 and is serving to present. He served as a Council Member of IACEE (International Association for Continuing Engineering Education) from 2001 to 2008. He was the General Chairman of the 9th WCCCE (World Conference for Continuing Engineering Education) held in Tokyo in 2004. He was elected as the 1st Vice President of AEESEAP in 2008. He is now serving as a Professor of Research Institute of Science, Nihon University since April 2008.