

Abstract

Fifteen years have passed since IEICE decided to set up “IEICE Overseas Section” as the local center for IEICE related academic activities, to support and encourage IEICE members studying or working abroad, especially staying in Far East and ASEAN countries. The fundamental scheme of the Section in the beginning was to reflect the opinions of the members, above all former scholars who have ever studied in Japan, on the internationalization of IEICE, through expected regional leaders. The number of members who registered as the IEICE Overseas Member was small in the beginning, it has been extended to grow over the rate 12% of the all IEICE members at the moment, and the number of the authorized Sections has been extended as well, from four to twelve. The above mentioned name of the Section was changed to “IEICE International Section” by the IEICE International Affairs Committee in 2015, to reform the organization from the viewpoint of matching it to the globalizing academic activities of IEICE. The IEICE Global Plaza set up in 2009 has played a role of fostering the IEICE International Sections through exchanging opinions or sharing the updated information between the Sections and IEICE Societies or Group, further between the members of different Sections each other. This article summarizes the background, current status and the future scope of the IEICE International Sections.

Keywords : IEICE, International, Global, Overseas, Section, membership, IEICE Global Plaza

1. Introduction

One century has passed since the mother organization of the Institute of Electronics, Information and Communication Engineers (IEICE), so called the Institute of Telegraph and Telephone Engineers of Japan (ITTEJ) commenced the first generation of academic institution for R&D activities and commercialization of advanced science and technologies in the field of telephone and telegraph services in May, 1917⁽¹⁾. The organization has been reformed to cover electrical communication technologies in 1937, electronics in 1967 and information technologies to be IEICE in 1987.

On the other hand, in USA, the American Institute of

Electrical Engineers (AIEE), the mother organization of the world’s largest technical professional society, the Institute of Electrical and Electronics Engineers (IEEE) was set up in 1884 and had been evolved through the invention and commercialization of electricity and telephone⁽²⁾. Further, another mother organization, the Institute of Radio Engineers (IRE) was set up in 1912 and devoted to radio and related electronics, both organizations were united into IEEE in 1963. The development process of both organizations IEICE and IEEE looks similar each other, apart from the scale of memberships and events. Meanwhile, IEEE’s international conferences represented by the Global Communications Conference (GLOBECOM) was reformed from the former national conference in 1965 and revived to be ICC '84 in Amsterdam in 1984 as the first global conference, and it has accelerated global conventions by various academic institutions over the world.

Meanwhile, many members of IEICE had chances to publish papers in transactions, journals or present

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papers in the international conferences by IEEE or the other international academic institutions in different countries since 1960's and some of them have experienced editorial works of international journals and/or monthly publications, or organizing international conferences or further setting up branches for academic activities in regions or countries. IEICE's R&D activities were categorized into some groups depending on the special fields to be accelerated, in 1985 and the R&D function of IEICE has been reformed into the current five Societies and Group in 1995. Some of them have taken initiatives in organizing their own international workshops, symposiums and conferences in collaboration with regional or local academic institutions, especially in Asian countries, in 1990's and thus, IEICE's academic activities have been internationalized.

As a result of internationalization of IEICE, the system of IEICE Overseas Section was internally authorized in 2001 and four Sections were set up in 2003. The system was renamed as IEICE International Section in 2015, to accelerate evolving activities based on each region. The number of IEICE International Sections has reached twelve in 2015.

The monthly publication, IEICE Global Plaza was set up in 2009⁽³⁾, to encourage international members or potential international members of IEICE Overseas Sections for their better understanding of IEICE's evolving academic activities and joining the IEICE based regional academic activities, through free opinion exchange or proposals. Quite many international members have positively provided their articles, the establishment of some IEICE International Sections was accelerated.

This article summarizes the historical background and current system of the IEICE International Section and refers to the future perspective and preferable scheme through the experience of IEICE Global Plaza.

2. Evolution of IEICE International Sections

2.1 Section Formation

The IEICE International Affairs Committee (IAC) was set up in April 1975, to review and promote international activities of IEICE. The main topics in IAC were related to the specified acceleration procedure and protocols of international conferences and collaboration with relevant academic institutions or societies under the institutions covering IEEE and some institutions in Korea. The detailed plan of internationalization has been

discussed by IAC after 2000 and it was decided to select a few regional representatives in Asian countries at first, in 2001 and the four IEICE Overseas Sections (IEICE International Section(s) reformed later, briefly IIS or IISs hereafter), were set up by IAC in 2003, considering the internationalization of IEICE activities, support and encouragement to former scholars who studied in Japan. The IISs have been evolved at first, mostly depending on the human relations between former international scholars or exchange researchers, and their advisors or acquaintanceship in Japan.

Fig. 1 shows the trend of evolving IISs. The number of Sections has slowly but steadily increased year by year since the establishment of the first four Sections. It has once declined due to a few Sections without consecutive activities, some Section has revived through the effort of expanding the membership and activities in the region so that the overall number of Sections has increased again.

The successive Representatives of each IIS who have taken the initiatives of evolving IEICE activities and membership development in each region, are listed in Table 1. As a background of Section formation, their human relations in each region or their close relations with IEICE Societies through paper review process, or co-organizing international conferences have effectively supported the sustainable organization and evolution of IEICE based events over the past fifteen years. Only Hong Kong Section encountered the stagnation of their IEICE activities due to the reducing trend of scholars studying in Japan, and unfortunately the activities of the Section was ceased according to the regulation referred to 2.2. Most of effective membership of the Section were transferred to IEICE Shanghai Section and taken over.

The Section Formation in Table 1 looks inharmonious each other due to the categorization and schemes of Sections different between the group of China, Korea,

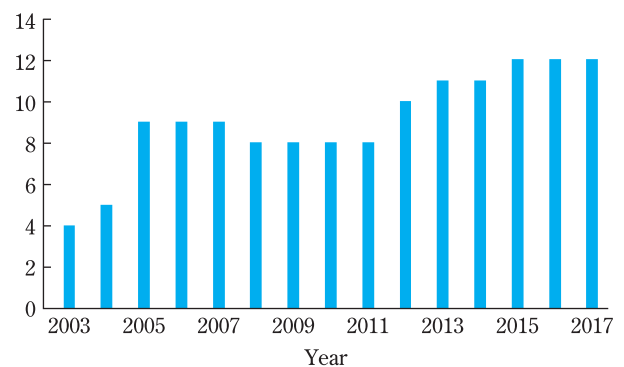


Fig. 1 Evolving IEICE International Sections

Table 1 International Section Representatives

Section	Representative (Title abbr.)	Affiliation	Term of Service
Bangkok	Prasit Prapinmongkolkarn	Chulalongkorn U	2003 Jun.-2007 May
	Watit Benjapolakul	Chulalongkorn U	2007 Jun.-2011 May
	Tuptim Angkaew	Chulalongkorn U	2011 Jun.-2015 May
	Supavadee Aramvith	Chulalongkorn U	2015 Jun.-present
Beijing	Zhisheng Niu	Tsinghua U	2003 Jun.-2007 May
	Jian Yang	Tsinghua U	2007 Jun.-2011 May
	Tao Zhang	Tsinghua U	2011 Jun.-2015 May
	Yongmei Sun	Beijing U of Posts and Telecommun.	2015 Jun.-present
Europe	Haris Gacanin	Alkatel-Bell NV	2011 Jun.-2015 May
	Mariusz Glabowski	Poznan Tech. U	2015 Jun.-present
Hong Kong	Kevin J. Chen	Hong Kong U of Sci. & Tech.	2005 Jun.-2007 May
Indonesia	Suhono Harso Supangkat	Institut Teknologi Bandung	2004 Jun.-2008 May
	Jaka Sembiring	Institut Teknologi Bandung	2011 Jun.-2015 May
	I. G. B Baskara Nugraha	Institut Teknologi Bandung	2015 Jun.-present
Korea, Commun.	Chul-Hee Kang	Korea U	2005 Jun.-2009 May
	Chimoon Han	Hankuk U of Foreign Studies	2009 Jun.-2011 May
	Choong Seon Hong	Kyung-Hee U	2011 Jun.-2016 May
	Ilyoung Chong	Hankuk U of Foreign Studies	2016 Jun.-present
Korea, Electronics	Hee-Don Seo	Yeungnam U	2005 Jun.-2008 May
	Duk-Gyoo Kim	Kyungpook National U	2008 Jun.-2012 May
	Jang-Kyoo Shin	Kyungpook National U	2012 Jun.-2016 May
	Seong Ho Kong	Kyungpook National U	2016 Jun.-present
Korea, Information	Yong-Jin Park	Hanyang U	2005 Jun.-2009 May
	Chan-Hyun Youn	KAIST	2009 Jun.-2011 May
	Dong-Whee Kim	Daegu U	2011 Jun.-2012 May
	Young-Jin Nam	Daegu U	2012 Jun.-2013 May
	Young-Bok Choi	Tong-Myong U	2013 Jun.-2014 May
	Jong-Il Park	Hanyang U	2014 Jun.-present
Malaysia	Swee-Huay Heng	Multimedia U	2015 Feb.-present
Shanghai	Ronghong Jin	Shanghai Jiaotong U	2007 Jun.-2011 May
	Wen Chen	Shanghai Jiaotong U	2011 Jun.-2015 May
	Jie Zhu	Shanghai Jiaotong U	2015 Jun.-present
Singapore	Le-Wei Li	National U of Singapore	2003 Jun.-2007 May
	Lei Zhu	Nanyang Tech. U	2007 Jun.-2011 May
	Arokiaswami Alphones	Nanyang Tech. U	2011 Jun.-2015 May
	Subramaniam Arulkumaran	Nanyang Tech. U	2015 Jun.-present
Taipei	Hung-chun Chang	National Taiwan U	2003 Jun.-2007 May
	Tzong-Lin Wu	National Taiwan U	2007 Jun.-2011 May
	Liang-Hung Lu	National Taiwan U	2011 Jun.-2015 May
	Hoang-Yan Lin	National Taiwan U	2015 Jun.-present
Vietnam	Ngoc-Binh Nguyen	VNU-U of Eng. & Tech.	2013 Jan.-2016 May
	Xuan-Tu Tran	VNU-U of Eng. & Tech.	2016 Jun.-present

(Note: U=University, Tech=Technological or Technology, Eng=Engineering, Telecommun=Telecommunications)

Europe and the group of the others based on each political region. The fundamental common idea of categorization can be taken as:

- (1) It is advantageous to the management of a Section to set up the Section corresponding to a country level or a union level region if the membership is not too big, as shown in Europe or

the others.

- (2) A region covering a big membership may be divided into plural geographical regions managed independently each other, as shown in China.
- (3) A region covering a big membership and including plural independent academic institutions in close collaboration with anyone of IEICE Societies may be divided into IEICE Society based Sections, as shown in Korea.

Fig. 2 shows the membership in each region. The membership in China and Korea is shown without division into the plural IISs, due to the difficulties of the current membership data management system, while each Section can contact all the members included in the region. On the other hand, the membership in Europe covers the membership in a wide area of Eastern, Central and Western European regions, it is required for the Section to efficiently manage the membership in the whole wide region. They have explored and efficiently managed it through setting up their annual international conference in widely spread countries in the region.

2.2 Regulation and Role of IIS Representatives

The scheme of internationalization of IEICE's organization and academic activities had been discussed in IAC from the end of 1990's to the beginning of 2000's. In those years, most of IEICE Societies challenged to organizing their own international workshops, symposiums and conferences based on IEICE Technical Committees or Societies themselves, so that they drastically extended the human relations with IEICE members or regional academic institutions in prosperous regions, especially in Far East and ASEAN countries.

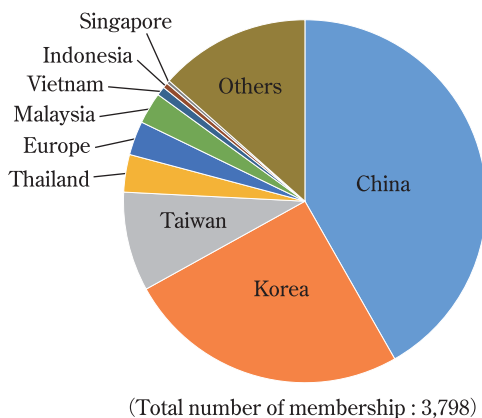


Fig. 2 IEICE International Members in each region registered at IEICE (February 2017)

As a result of preliminary discussion of regional activities, it was decided to nominate a few regional representatives, and the scheme of IEICE based organization and activities outside of Japan was further studied in IAC. Finally, it was decided to set up the "IEICE Overseas Section", that is the current IIS, by the IEICE Board of Directors in 2001. The first IIS Representatives were authorized in four active regions of Beijing, Taipei, Bangkok and Singapore, in the 2003 fiscal year meeting of IAC.

The representative example of international conferences which was early organized with the initiative of IEICE would be APSITT '93 held with 53 presentations and 180 participants from eleven countries in collaboration of IEICE and the Engineering Institute of Thailand under H.M. The King's Patronage (EIT), in Bangkok in November 1993⁽⁴⁾. Many VIPs including M.L. Dr. Birabhongse Kasemsri, His Majesty's Deputy Principal Private Secretary, Presidents of Asian Institute of Technology (AIT), Chulalongkorn University, King Mongkut's Institute of Technology Ladkrabang, representatives of EIT, TOT, CAT and PTD have encouraged the participants. Technical Committee on Information and Network and Technical Committee on Switching Systems of IEICE Communications Society played the main role of conference organizer. The author who served AIT as the Professor for three years around 1993 was involved in setting up the conference as one of the IEICE Technical Committee members and APSITT '93 Organizing Committee located in Bangkok. One of the main organizers, Dr. Prasit Prapinmongkolkarn was nominated as the first Representative of IEICE Bangkok Section in 2003 and greatly contributed to the internationalization of IEICE. His colleagues who joined the Organizing Committee evolved the Section as his successors to the present, and the Section further developed another international conference TJMW in collaboration with IEICE Technical Committee on Microwaves of IEICE Electronics Society in 1999 and has organized the conference every year after 2009⁽⁵⁾.

APSITT '97 also was held with 102 presentations and 250 participants at Hanoi University of Technology (HUT) in collaboration with Radio Electronics Association of Vietnam (REV). It was inaugurated by H.E. Dr. Pham Gia Khiem, Minister of Science, Technology and Environment of Vietnam and provided guest speeches by H.E. Dr. Hoang Van Nghien, Chairman of Hanoi People Committee, and Prof. Dr. Nguyen Minh Hien, Rector of HUT, with special guests, H.E. Mr. Nguyen

Khanh, Deputy Prime Minister of Vietnam and Prof. Dr. Tran Hong Quan, Minister of Education and Training of Vietnam. The Vietnamese leading people who joined or supported the APSITT '97 Organizing Committee contributed to organizing ICDV '2000 in collaboration with Technical Committee on Integrated Circuits and Devices of IEICE Electronic Society⁽⁶⁾. One of the main organizers, Prof. Dr. Nguyen Ngoc Binh, President of University of Engineering and Technology, VNU was nominated as the first Representative of IEICE Vietnamese Section in 2012 and has greatly contributed to the internationalization of IEICE as well.

On the other hand, Dr. Haris Gacanin of Alcatel Lucent Bell NV was nominated as the first Representative of IEICE Europe Section in 2011 and the international conference ICTF '2013 was set up with the initiatives of IEICE Europe Section in collaboration with IEICE Communications Society at Sarajevo in Bosnia and Herzegovina, in 2013, through their experience of workshops of IEICE⁽⁷⁾.

In order to efficiently set up IISs and make their activities sustainable, it was recognized as an important issue to standardize the procedures of regional academic activities, financial support by IEICE and duties of the Representatives through the regulation, and to share the relevant information between IAC and each Section Representative. The detailed rules have been reviewed by IAC every year and revised to be the current ones. The main features of the regulation and role of the Representatives are summarized as follows:

(1) Purpose of IIS Representative Program

It is to support increasing international scholars and scientists who have ever studied in Japan or joined IEICE activities with membership, above all, the scholars who returned to their mother countries in Asian region or working in global environment of business or R&D activities, for their potential demand of IEICE publication services including Journals or Transactions.

(2) Expected Role of IIS Representative

The IIS Representative is expected to plan, organize and implement IEICE sponsored lectures, workshops or conferences in the region every year, and encourage the regional IEICE members. It is also expected to have IEICE activities and the benefits of IEICE membership understood by potential IEICE members through joining the events.

(3) Attendance at IIS Representatives Meeting

The IIS Representatives are invited to join the annual IIS Representatives Meeting. The Meeting has been set up on the occasion of the annual IEICE General Conference so that they could easily join relevant Sessions of the Conference, have the opportunities of presenting their research papers and exchanging opinions with general participants or leading researchers. In 2017 fiscal year, the annual IIS Representatives Meeting was set up on the occasion of IEICE Society Conference in commemoration of the 100th Anniversary of IEICE which was held in September 2017.

(4) Special Session in annual IEICE Conference

Additionally, the attendance of IIS Representatives at the Meeting is a good chance for the general participants in each Conference to know the activities of IISs. Thus, a Special Session planned by IEICE Conference Committee has been assigned to IIS Representatives every year. In the beginning of the Session planning, some selected IIS Representatives gave speeches directly related to their research activities, while they encountered a problem that the number of general participants in the Session tended to be weak due to the difference from Sessions of IEICE Societies in the same special fields. Thus, the fundamental scheme of the Special Session has been discussed and improved by IAC year by year. Most of the Special Sessions have provided the overview of ICT R&D in each region so that they also could easily offer their research activities to the general participants. The Special Session was changed to a Poster Session in 2015, and to a Welcome Party in 2016 for international scholars who were studying in Japan, to strengthen the ties between IISs and those scholars through the introduction of all IISs and scholars who joined the Conference. In 2017 Society Conference, the Special Session was rearranged to the introduction of R&D trend of IoT in each region, but only in selected outstanding regions with the major membership or global R&D activities in the relevant field of smart city.

(5) Reformation of IIS Representatives Meeting

The IIS Representatives Meeting was reformed to a new concept of "All Sections Meeting" to activate the mutual opinion exchange between IISs and domestic IEICE Sections in Japan adding to the current IEICE Societies and Group, for the globalization of IEICE, in March 2014. The new Meeting has been successfully managed by IAC every year, constructive opinions or

proposals to accelerate international or global activities and globalize the organization of IEICE have been offered and discussed face to face, on the occasion of the attendance of Representatives.

3. Publication of IEICE Global Plaza

The IEICE Global Plaza (here, briefly IGP) is a monthly news letter providing IEICE international members and potential members covering international students, young faculties and engineers, with a forum for free mutual opinion exchange or positive proposal of ideas toward the future globalized IEICE. It has been delivered at once to all IEICE international members staying outside of Japan, through the media of mail magazine at first. A few months later than the delivery of the first volume, it was decided by IEICE Board of Directors to publish the whole article in the IEICE Monthly Journal from the viewpoint of contribution to the globalization of IEICE⁽³⁾. It is summarized as follows:

(1) Background

The scheme of globalizing IEICE's organization and activities was discussed as a main issue by the WG to promote the globalization of IEICE under IEICE Strategic Planning Office at first around 2007. In parallel, another driving force "Task Force for International Policy and Planning of IEICE", briefly TFIPP was set up with eight leading people who had ever experienced global academic activities, under the same Office to discuss and generate detailed plans of globalization, and it has been evolved through the invitation of more number of leading people who were outstanding in taking initiatives in the multi-cultural environment represented by Asian region.

These two groups were united into one TFIPP and transferred to IAC to efficiently manage the globalization of IEICE. One of the outputs of TFIPP is the IEICE Global Plaza. The global experience of the author as Associate Editor in charge of Chapter Corner for the monthly Global Communications Newsletter in IEEE Communications Magazine over the two years from October 1998⁽⁸⁾, and his higher education HRD activities in Asian region for long years were effective to collect outstanding articles from leading researchers over the world, especially in Asian region.

The first volume of IGP was published in the IEICE Monthly Journal, no. 2, vol. 92, 2009⁽³⁾. The IGP has

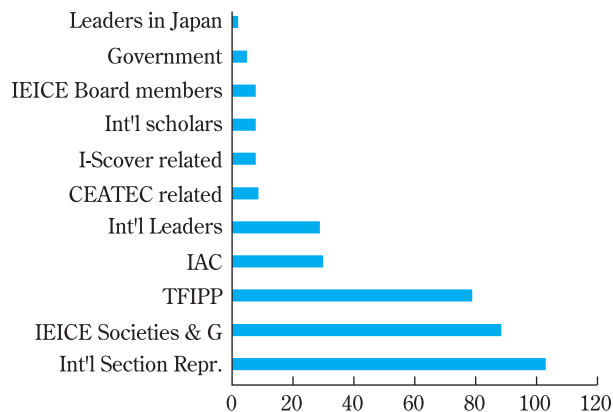


Fig. 3 Article contribution by IIS Representatives

been published up to IEICE Monthly Journal, no. 2, vol. 99, 2016, 85 times in total over the seven years, the total number of articles published in IGP reached 382. It was once terminated as a result of discussion by IAC, to reform the relations between Society based publications and IEICE Global Plaza, while English publications in each Society have been independently evolved over the eight years of IGP publication.

(2) Article contribution by IIS Representatives

One of the major author categories of IGP is IIS Representatives. Fig. 3 shows the ratio of contribution by IIS Representatives over the seven years, and it proves that they have so effectively used IGP as their common media to share the useful information or record of activities in global academic environment each other, further with IEICE Societies and Committees.

4. Future Perspective of IEICE International Sections

The strategy of each IIS well matched to the regional trend of ICT R&D and its positive activities have accelerated the evolution of IISs since the establishment of IISs in 2003. On the other hand, the overall number of international students studying in Japan tends to increase over the past half century according to Government statistics⁽⁹⁾. The IEICE membership of international scholars has increased as well. Fig. 4 shows the change of membership in the regions covered by IISs in the past ten years. The increment ratio of membership is remarkable in China, Malaysia, Vietnam and Indonesia apart from the quantity. Table 2 shows the change of the corresponding total membership in the same term.

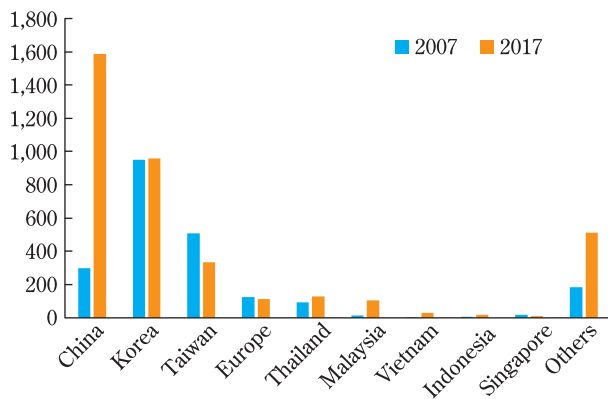


Fig. 4 The change of regional membership covering IISs in the past ten years

Table 2 The growing overall international membership

Fiscal Year	2007	2017
Grand Total	33,304	29,751
International Members	1,996	3,798
Ratio of International Members	6.0%	12.8%

Table 3 Potential International Sections in 2017

Membership	Region
1,000~2,000	<i>China</i>
501~1,000	<i>Korea</i>
201~500	<i>Taiwan</i>
101~200	India, <i>Thailand, Malaysia, Europe</i>
51~100	Iran
21~50	USA, Mexico, Turkey, <i>Vietnam, Brazil, Pakistan</i>
11~20	<i>Indonesia, Saudi Arabia, Canada, Singapore</i>

(Note : Italic notation means the regions covered by current IISs)

Most of IISs tend to evaluate the world level high quality paper publication and prompt paper review process in IEICE Societies and Group, the increasing trend of membership of IISs will continue and contribute to the evolution of IEICE successively toward the future.

Table 3 shows the potential regions which may establish new IISs with the current membership satisfying the regulations. It depends on the human relations between members in each region and IEICE with the positive leadership of a few members in each region⁽¹⁰⁾. The valuable experience of leading people of IAC who established the first IISs in the beginning of 2000's reminds us of the necessity of positive discussions of a new roadmap of foresighted reformation for the future IISs, facing the globalizing environment of academic activities. Then, it will be important to listen

to the voice of international members and share the valuable information between all members, especially younger generation who will be the core of IEICE, through a community where they can easily communicate each other or a union of alumni of IEICE members. The experience of IEICE Global Plaza will be available for this purpose.

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