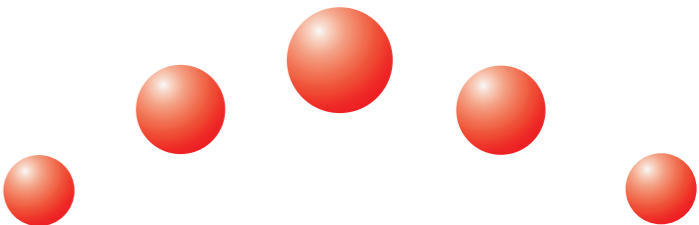


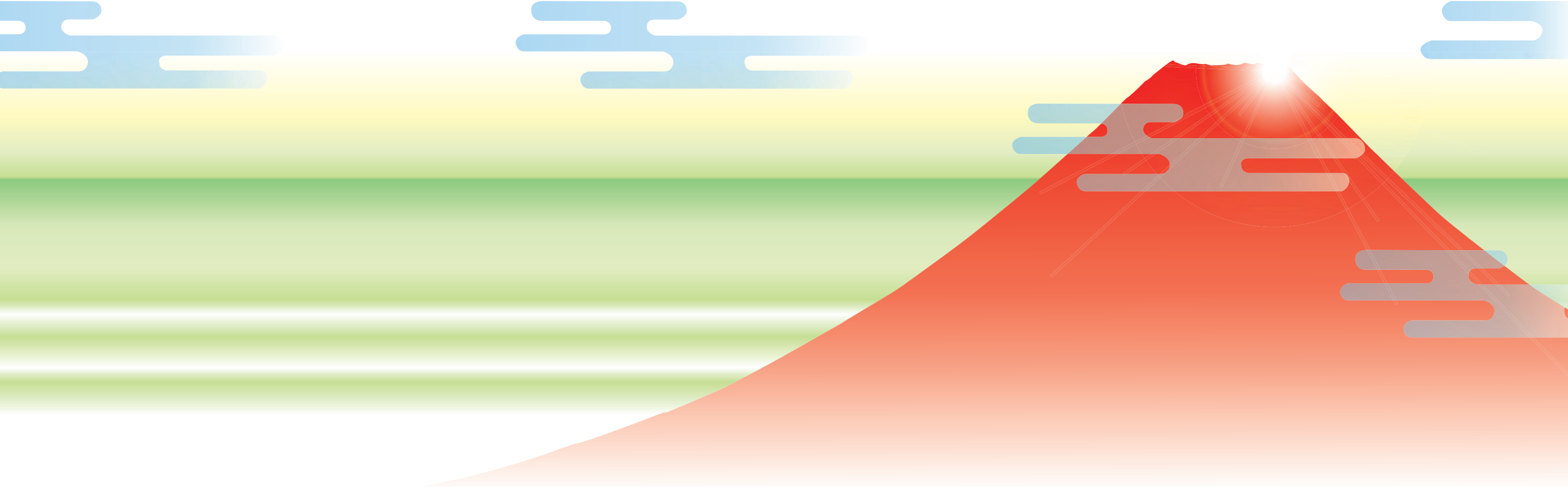


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 ASSOCIATION OF JAPANESE CONSULTING ENGINEERS
(FIDIC Member Association)

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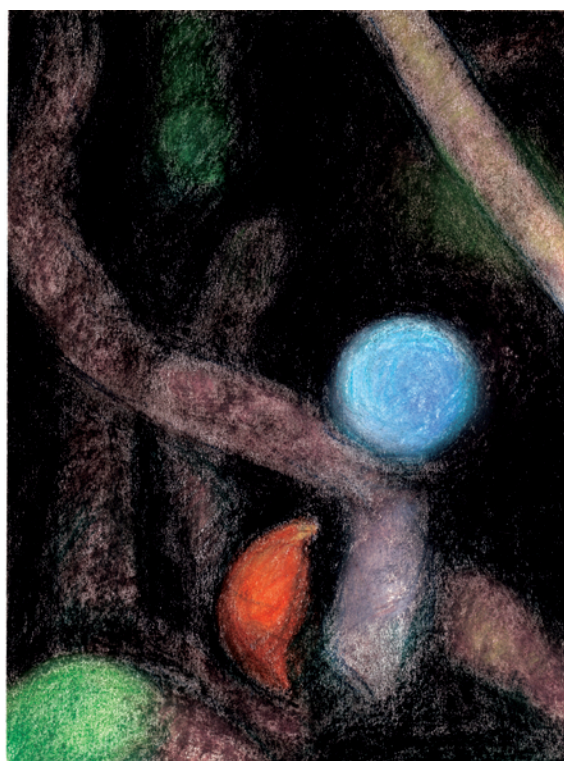


Illustration
Masatoshi Tsutsui, Tsumiki Kobo

AJCE and its Activities, 2008



Akihiko HIROTANI
President, AJCE

The Association of Japanese Consulting Engineers (AJCE) was established in 1974 and was approved as a legal entity by the Science and Technology agency of Japan (currently, Ministry of Education, Culture, Sports, Science and Technology) in 1977. AJCE is a member of the International Federation of Consulting Engineers (FIDIC) representing the interests and views of Japanese consulting engineers.

In recent years, there have been pronounced changes in the business environment for consulting engineers. In particular, strong economic growth in Asia—China, India, Korea—and elsewhere has brought dramatic expansion in opportunities and challenges for the consulting industry. The roles of consultants are changing greatly. A wider range of skills is demanded beyond construction engineering, extending to the solution of environmental and social problems such as those relating to population, gender-equity, and education.

It is now three years since the Act for Promoting Quality Assurance in Public Works came into force in Japan. This law emphasizes that considerations other than cost must be taken to secure product quality. It also specifies that designers play a crucial role in determining the quality of the product. Revision of this law is now being considered so that public procurement emphasizing quality will predominate. Consultants must therefore ensure that their engineering skills are of the highest standard and should pay attention to upgrading them as required.

Other news

The ASPAC/TCDPAP annual conference was held in March 2007. (ASPAC is the Association for FIDIC member associations in the Asia-Pacific Region; TCDPAP is the Technical Consultancy Development Programme for Asia and the Pacific.) About 350 people from Asia and the Pacific attended the conference and discussed three themes, engineering design, post disaster reconstruction, and social &

environmental impacts.

In September, the FIDIC annual conference was held in Singapore with the theme "Global Services, Enhanced Partnerships". Our members contributed to the conference in various roles, demonstrating that AJCE is one of the major contributing member associations of FIDIC.

In October, six young Australian engineers came to Japan for three weeks under the Young Professionals Exchange Program. This program has been continuing for about 10 years to foster relationships between AJCE and its sister associations of Australia and New Zealand and to develop internationally minded engineers in each country.

In November, the annual AJCE seminar was held. Design-Build and the roles of consultants were discussed. Many members from AJCE participated.

All of AJCE's eight committees continue to be very active. These committees are: Ethics; Policy and Planning; General Affairs & Finance; Membership; International Activities; Professional Development; Engineering Development; and Publicity & Relations.

AJCE will continue those activities in the coming year. We will also participate in FIDIC activities such as a meeting in Seoul in April and the FIDIC Annual Conference in Quebec in September.

AJCE strives to enhance the position and quality of private consulting engineers who are independent of manufacturers, contractors and others. By doing so, AJCE contributes towards the advancement of science and technology, the development of industry, the well-being and sustainability of the built environment, and the enhancement of human security and welfare.

Thank you.

Public image matters



Taisuke MIYAO

Director

Procurement and Supervision Project Development Department
Japan Bank for International Cooperation (JBIC)

In mid January 2005, four weeks after the Indian Ocean Tsunami, I was in Thailand's Phuket Island, wondering the difference between the image of vastly devastated island I had from the media, and the real situation in front of my eyes.

As the senior representative of JBIC Bangkok office, I traveled to Phuket to see the situation of jetties, roads and other facilities constructed under Japanese Official Development Assistance (ODA) loans. At that time, several thousand tourists and local people were still missing. Daily newspapers daily showed big photos of devastated areas on their top pages. Every morning, NHK (Japanese public broadcasting) TV news started scenes of rescue activities from Phuket island, not from India, Indonesia, or Sri Lanka although all of these countries were affected. The Embassy of Japan in Thailand issued and maintained a warning to the public saying that there were possibilities of epidemic diseases due to serious unsanitary situations in the so called "affected areas."

Yes, Kao Lak, most affected area in Thailand, was completely devastated. One boat was on the hill, several kilometers away from the shore. A number of luxury resort hotels were completely washed away and the scene was like a Hollywood movie set.

However, what myself and my colleague in Phuket saw was much different to what we saw in the media. Clean and vacant, unaffected oceans and many hotels and restaurants were completely empty without any damage at all.

If I thought carefully in advance, the situation could be easily understood. Tsunami hit west side of the island, therefore, central and east side of the island had no affect at all. But it was beyond my imagination that only 6 or 7 out of 13 beaches in the

west coast were hit by Tsunami. Half of them had nothing to do with even high wave.

People working for tourism industry were suffering because of no visitors except rescuers. Thousands of service employees were laid off. Owners of companies were quite unhappy or ,I would say frustrated about mass media who tried to focus only on tragic stories. It missed the majority of people who were still living normally and needed to continue to live normally. However, influence of mass media was so powerful to give impression to the all over the world that Phuket island was totally destroyed. One of my friends in Japan even thought that Bangkok was suffered by Tsunami flood.

I learned that the mass media cannot report all of reality. The other side of the coin is always missing, thus viewers or readers must be careful and imaginable to think how the real situation is behind the news paper article.

The Japanese ODA has always been a classic case for this. According to a recent survey, the image of Japanese ODA is not that positive among general public. One of the major reasons is that the mass media tend to report negative news about it, such as corruption, unachieved object of projects, and delay of implementation. A newspaper journalist told me once, "Good things of ODA have no news value. If an ODA project is failed, I am happy to write it because it is the news."

As of October 2008, ODA activities of JBIC will be transferred to JICA, which will become one of the largest bilateral development institutions in the world. One of our important tasks at the New JICA is to make an effort to create a good image of ODA and maintain it, by of course doing good job and trying to explain more the reality of ODA activities to the mass

media and general public.

Similar to ODA, tourism and other industries, the consulting industry may need to create and maintain its strong positive public image in order to progress forward. At the FIDIC annual conference held in Singapore on September 2007, one participant from India raised the issue of how to attract young people to consulting industry rather than information technology or financial industry. I have heard that this is not only the situation in India but also in many other countries including Japan.

Consulting engineer is, in my view, the job of creation, innovation, and intelligence. It is the job to transfer mere concept on the paper to real materials. It is the job to challenge issues human being is facing in the 21st century such as water, food, energy and natural

disaster. High level of soft skill as well as technical skill is required to realize projects which various stakeholders with different background are involved in.

I believe that young generation has a strong interest in a job to contribute to the world and society, not only to the financial benefit. The key is how to send the good image of the job to young people effectively. It should not be manipulation but honest, genuine, and real feature of the excitement.

The basic question I have to ask here is whether you can talk enthusiastically to your children (grand children, spouse, or, friends) dream, fun, value and pride of your work. If the answer is positive, the future of the industry would be bright. How about my case? Let me think for a while and I will talk to my sons about my job tonight.

The 1st Asia-Pacific Water Summit



Kazumasa ITO
Membership Committee , AJCE

The 1st Asia-Pacific Water Summit, which was hosted by Asia-Pacific Water Forum and Asia-Pacific Water Committee, was held on 3rd & 4th of December in 2007 in Beppu, Oita, Japan.

The Water Summit was the first highest level meeting for water resources.

The Summit which encouraged solution of the issue of water resources and shared scientific knowledge, practices and experiences about water resources and strengthened efforts by reaching political commitment was held for gathering to consider ways of solution for the issue of water resources.

Asia-Pacific region is composed of 60 %, 37 hundred million of population has still faced serious problem, such as one out of five cannot use safe drinking water, about half of population cannot use sanitary accommodations, and about 80% of death by flood damage in the world, occur in this region.

Issues of water resources have become one of significant issues which affected not only for concerned parties of water resources but also governmental affairs.

The Summit was held as the first step to address the issues for working together with heads of states.



Opening ceremony



Conference room

On 3rd and 4th of December, the opening ceremony of the summit was held opening remarks by Mr. Yoshiro Mori, Chair of Steering Committee of 1st Asia-Pacific Water Summit/ Former Prime Minister of Japan, remarks by His Imperial Highness the Crown Prince of Japan, greetings by Mr. Yasuo Fukuda, Prime Minister of Japan, Keynote Speech by His Royal Highness Prince Willem-Alexander of the Netherlands, Chairman of United Nations Secretary-General's Advisory Board on Water and Sanitation, memorial

speech by His Imperial Highness the Crown Prince of Japan, speeches by the heads of governments and sessions by themes..

At the session, participants had vigorous discussions about climate change, glaciers, and water resources in Himalayan region, the small island's dialogue on water and climate, water-related disaster management, water for development and ecosystems.

The summit adopted proposals from each session as the statements from Beppu at the end.

- ◆ Recognize the importance of provision of safe drinking water and sanitation are a basic human rights and a fundamental aspect of human security;
- ◆ Reduce by half the number of people who do not have access to safe drinking water by 2015 and aim to reduce that number to zero by 2025;
- ◆ Reduce by half the number of people who do not have access to basic sanitation in our region by 2015 and aim to reduce that number to zero by 2025, through the adoption of new and innovative sanitation systems that are not as water reliant as current methods
- ◆ Accord the highest priority to water and sanitation in our economic and development plans and agendas and to increase substantially our allocation of resources to the water and sanitation sectors;
- ◆ Improve governance, efficiency, transparency and equity in all aspects related to the management of water, particularly as it impacts on poor communities. We recognize that while women are particularly vulnerable, they are also resilient and entrepreneurial, hence, should be empowered in all water-related activities;
- ◆ Take urgent and effective action to prevent and reduce the risks of flood, drought and other water-related disasters and to bring timely relief and assistance to their victims;
- ◆ Support the region's vulnerable small island states in their efforts to protect lives and livelihoods from the impacts of climate change;
- ◆ Exhort the Bali Conference to take into account the relationship between water and climate change, such as the melting of snowcaps and glaciers in the Himalayas and the Pamirs, and rising sea levels, which are already having an impact on some countries in the region;
- ◆ Establish concrete goals for the 2008 Toyako G8 Summit to:
 - commit to support the developing countries to achieve their MDG targets on water and sanitation; and
 - take immediate action to support adaptation to climate change by developing countries;.

- ◆ Empower a high-level coordinating mechanism in our cabinets and where possible, appoint a minister in charge of water to ensure that all issues related to water and sanitation would be dealt with in a holistic manner,
- ◆ Respect and strengthen the region's rich history of water-centered community development, including the rehabilitation of urban waterways and protecting the environmental integrity of rural watersheds; and
- ◆ Work together with other like-minded institutions, entities and individuals in order to achieve our collective vision of water security in the Asia-Pacific region
 - We will support the Policy Brief as prepared by the Asia-Pacific Water Forum family.
 - We encourage all governments to make all efforts to implement its recommendations.
 - We have the will and courage to realize our vision.

The summit which was held by participating 56 nations and regions around the world, 10 heads of nations, 32 cabinet officials discussed an issue of water resources in Asia-Pacific region and sent messages of the summit to the world.

The issue of water resources is not only environment concern but also a problem of poverty. The agenda of the summit were not only to discuss the issues of Asia-Pacific region but also related to around the world, such as 80% of death by flood damage occurs in Asia-Pacific region which makes up 60% of the world population.

Even though the conference was held as summit to have various discussions and propositions, we, consulting engineers, should make efforts as our tasks to take on concrete form.

Heads of nations made suggestions to solve the worldwide issues of the 21st century using experiences and knowledge.

Some of these issues have already been brought to realization at the political level, nevertheless it is a chance for us, consulting engineers, should take all the effort for solution.

Activities of ASPAC Sub-Committee in AJCE



Masakazu MAEDA
Chief of Secretariat

ASPAC Sub-Committee of International Activity Committee, AJCE

1. Introduction

ASPAC (FIDIC Asia-Pacific Member Associations) was initiated at the FIDIC 1977 Helsinki Conference based on an unofficial meeting among delegates from Australia, Hong Kong, Japan, Malaysia, New Zealand, and Singapore to discuss issues that these countries are interested in. After this, these members continued to have a meeting every time the annual FIDIC Conference was held, gradually joining some other member associations (MAs). The number of MAs as of February 2008 is 19, as shown in Table 1. As for regional member associations under FIDIC, there are only two: GAMA (Group of African Member Associations) established in 1992 and ASPAC.

AJCE has been participating in ASPAC activities since its establishment. For example, Dr. Yumio Ishii, former Chairman of AJCE, as well as former FIDIC Executive Committee Member and present Chairman of the Japan Society of Civil Engineers, worked as Chairman of ASPAC from year 2000 to 2003 to enhance the performance in each region. In 2006, Mr. Akihiko Hirofumi, present Chairman of AJCE, was elected as Chairman of ASPAC and worked with the new

secretariat organized in AJCE, the ASPAC Sub Committee of International Activity Committee. This article briefly describes the major activities of this Sub-Committee that may not be popular with the readers.

2. Formulation of ASPAC Action Plan

ASPAC *Action Plan 2007-2009* was formulated aiming at promoting better relations among ASPAC member associations in order to commoditize information and expand business chances in the Asia Pacific region. These actions will result in the enhancement of interaction within the member associations more and more, and in the expansion of their business opportunities. Target and concrete actions to be taken in each year are as set out below.

1) First Year (2007)

Target: Raising awareness and creating communication environment among the MAs

Concrete Actions:

- a) The ASPAC Newsletter shall be issued periodically and displayed on the ASPAC page of the FIDIC website.
- b) Information regarding the annual action plan of each member association shall be provided to the ASPAC Secretariat presently established in AJCE (Association of Japanese Consulting Engineers), which shall compile and tabulate the information provided. The annual action plan of member associations after compilation and tabulation shall be displayed on the ASPAC page of the FIDIC website.
- c) A list of field of expertise, number of engineers and so on of each member association shall be displayed on the ASPAC page of the FIDIC website.

2) Second Year (2008)

Target: Gathering and arranging information from the MAs and providing it to them as needed

Concrete Actions:

- a) Information regarding annual action plans, list

Table 1 ASPAC Member Associations

1.	Australia
2.	Bangladesh
3.	China
4.	China, Hong Kong
5.	China, Taiwan
6.	India
7.	Indonesia
8.	Iran
9.	Japan
10.	Korea
11.	Malaysia
12.	Nepal
13.	New Zealand
14.	Pakistan
15.	Philippines
16.	Singapore
17.	Sri Lanka
18.	Thailand
19.	Vietnam

Alphabetical order as of February 2008

of field of expertise, number of engineers and so on of all member associations shall be displayed on the ASPAC page of the FIDIC website.

b) News and activity reports of all member associations shall be collected and compiled by the Secretariat and displayed on the ASPAC page of the FIDIC website.

3) Third Year (2009)

Target: Securing consistency and sustainability of ASPAC activities, and presenting directions toward the future

Concrete Actions:

a) The performance in three years shall be reviewed, and general directions of the follow up actions of ASPAC shall be proposed.

b) Problems on the establishment of an ASPAC permanent secretariat shall be identified and sorted out, and solutions to these problems shall be suggested.

The above actions are also expected to bring about the increase in number of consultant associations representing countries that wish to join ASPAC, so that consequently the number of FIDIC member associations will grow.

3. Renewal of ASPAC Website

An ASPAC home page in the FIDIC website has been created, but the site has some problems such as: i) difficulty of retrieval by the public; ii) difficulty in understanding the screen composition with misspelled and omitted letters; and iii) the inability to update information appropriately. Therefore, the ASPAC Sub Committee in AJCE tried to create a new website and proposed it to the FIDIC Secretariat in order to solve these problems and improve the exchange of information among the MAs. The main contents of the proposed website are as follows:

- ◆ Introduction of ASPAC (About us)
- ◆ Message from the Chairman
- ◆ List of ASPAC Member Associations (can be linked from the top page to the home page of each MA's website)
- ◆ What's New
- ◆ Activities of each MA
- ◆ ASPAC Newsletter
- ◆ Linkage (FIDIC, AJCE, GAMA, etc.)

The concept and contents of the website were explained at the ASPAC Extra Meeting in Lahore, Pakistan in March 2007 and at the ASPAC Executive Committee Meeting and General Assembly Meeting during the FIDIC 2007 Singapore Conference in September. Although the proposed website was acceptable in these meetings, the page is yet to

be launched because arrangement by the FIDIC Secretariat is required. The Secretariat of the ASPAC Sub Committee in AJCE has exerted more pressure on the FIDIC Secretariat to complete and open the website to the public.

4. Participation in Seminars and Conferences, and Convene of ASPAC Executive Committee Meeting and General Assembly Meeting

ASPAC has been holding an international conference with the Technical Consultancy Development Programme for Asia and the Pacific (TCDPAP) once a year. The theme of the conference held at Lahore, Pakistan from the 20th to 22nd of March 2007 was "Engineering and Disaster Management." Approximately, 350 participants attended, including the delegates from 16 countries.

Some three presentations by Japanese engineers were made in this conference: "Disaster in Japan" by Mr. Akihiko Hirotsu, Chairman of AJCE; "Japan's Experiences - Tyuetsu Earthquake -" by Mr. Momose of Nippon Koei Co., Ltd.; and "Disaster Prevention Measures in Global Local Context" by Dr. Yamashita of CTI Engineering Co., Ltd., the Secretary General of AJCE. During the conference, the ASPAC Extra Meeting was held to discuss the new ASPAC's website as mentioned above, as well as the introduction of training programs supported by FIDIC. A joint seminar of TCDPAP and ASPAC will be held in Seoul, Korea, between the 22nd and 25th of April this year, with the theme "The Role of Engineering in the Globalization Era." The ASPAC Extra Meeting is planned to be held during the conference in the same way as before.

Apart from the above meeting, the annual FIDIC conference has included the ASPAC Executive Committee Meeting and the General Assembly Meeting as well. In the last FIDIC conference in Singapore, a new ASPAC Executive Committee member was elected and the ASPAC Action Plan was presented.



AJCE Activity 2007

AJCE's Special Seminar 2007 FIDIC Red Book MDB Edition, March 2006



Masafumi MIYAMOTO

Chair International Activity Committee, AJCE

AJCE held a special seminar on FIDIC Red Book MDB Edition on 13th July 2007 at the conference room of Oriental Consultants. Red Book MDB Edition (official title: Conditions of Contract for Construction, MDB Harmonized Edition) was prepared by the World Bank based on the Red Book published by FIDIC in 1999. MDB Edition is to be utilized for construction works funded by multilateral development banks. The first edition was released in May 2005, and the amended edition was published in March 2006. Contract Sub-Committee of International Activity Committee analyzed and studied changes made to New FIDIC Version (1999). Results of the analysis and study were presented at this seminar.

Red Book MDB Edition, explanation of the Red Book, and comparison tables of MDB Edition and New FIDIC Version were handed over to the participants. Sub-Committee chair Mr. Konishi gave a lecture using power point slides explaining features of the MDB Edition and amended clauses included in 1st

to 20th clauses. Mr. Konishi mentioned background of amendments on amended clauses based on the analysis conducted by Contract Sub-Committee. Amendments were made mainly for, i) clarification of rights and duties by mentioning un-clear points in New FIDIC Version, ii) correspondence with current changes of society, and iii) requirements by MDBs. Mr. Konishi indicated some points to be clarified further in clauses regarding "Risk and Responsibility", "Insurance", and "Claims, Disputes and Arbitration". The lecture was followed by discussions. Questions and comments were presented by participants representing contractors and consultants.

Over 100 applications were received which was more than expected, and many were to be rejected. This indicated increased interest of members in Red Book MDB Edition. AJCE invited ten-member delegation from Korean Engineering Consultants Association (KENKA) to the seminar. A social gathering for KENKA and AJCE members was held after seminar.



Mr. Konishi



KENKA and AJCE members

AJCE Activity 2007

AJCE/ACEA Young Professionals Exchange Programme 2008 -unique experiences for young engineers-



Keiichi KANAI
Chairman

Professional Development Promotion Sub-Committee, AJCE

Young Professionals Exchange Programme (YPEP) was established in 1996 to develop good relationships and friendships between Japanese and Australian young consulting engineers through mutual visit and stay with member firms of AJCE and its Australian counterpart, ACEA (Association of Consulting Engineers Australia). In the past decade, more than 90 young engineers participated in the programme, and it has been noted in the FIDIC society as a good example of international capacity building effort.

Last year, AJCE and its member companies hosted six young professionals from Australia's leading consulting firms for three weeks in October. The programme consisted of internship at host companies and various official events offered by AJCE, such as Young Summit Forum and Weekend Trip to Kyoto & Nara. While I believe everybody fully enjoyed and appreciated the programme in Japan, I would like to emphasize the importance of the new component

YPEP2007 Schedule of Program

	Date		Event
	June 13 th	Wed	
Pre-visit dialogue	Until Sep. 30 th	Sun	Kick off Studying Japanese culture and mind with a book AJCE provided and submission a report on each to AJCE before September 30 th . Communication with Japanese hosts and mentors on topics to learn in Japan.
	Oct. 11 th	Thu.	
Staying in Japan	Oct. 12 th	Fri.	All trainees arrive at Tokyo Orientation Meeting (14:00-15:15) Welcome Party (17:30-19:00) Unofficial late night drinks (19:30-whenever)
	Oct. 15 th	Mon.	Training Program at each host company starts
	Oct. 27 th	Sat.	Tour to Kyoto & Nara, ancient towns
	Oct. 28 th	Sun.	
	Nov. 2 nd	Fri.	Submission a report of the program to AJCE. Young Summit (13:30-17:30) Farewell Party (18:00-20:00)
	Nov. 3 rd	Sat.	Departure for each destination
	Following up dialogue	Until Dec. 24 th	Mon



Welcome Party

List of companies and exchanges of YPEP 2007

No.	Company in Australia Name	NAME	Host company in Japan
1	Arup	David Murchland	CTI Engineering Co., Ltd.
2	Costin Roe Consulting Pty Ltd	Mark Wilson	IDEA Consultants ,Inc.
3	Costin Roe Consulting Pty Ltd	James Disher	Oriental Consultants Co., Ltd.
4	Maunsell Australia	Katherine Alexander	Oriental Consultants Co., Ltd.
5	QANTEC McWILLIAM	Nathan Scott	Chodai Co., Ltd.
6	Simpson Kotsman Pty Ltd.	Robert Spenceley	P.T. Morimura & Associates, Ltd

AJCE Activity 2007

added to the programme last year, which is pre-visit "dialogue" between a participant and his/her mentor from the host company. The "dialogue" was introduced to YPEP as a result of intensive discussions between AJCE and ACEA toward improvement and revitalization of the 10 year old programme. It was intended to help a participant and a mentor know each other in advance so that the programme could be started more readily and effectively. This worked as well as we had expected. Despite some difficulties in communication experienced in the early weeks, the engineers on both sides introduced themselves and exchanged such information as their technical background, their firms' business lines and their points of interest. By the time the programme started, they had become somewhat familiar with each other, and the opening session on October 12 turned out to be the most lively and effective one in the YPEP history.

The contents of internship programmes were left to each host company, so it could be structured to meet a participant's interest and utilize a host company's area of expertise. Generally, they included discussions with young Japanese engineers, working on actual projects with mentors, project site visits and meeting with clients, and I am sure that they also included many Japanese-style dinner parties, of course.

As a main social event, AJCE organized a weekend trip to the famous historic cities of Kyoto and Nara, where all the participants and mentors enjoyed beautiful temples, shrines and gardens in a pleasant autumn setting. They stayed at a traditional Ryokan (Japanese-style hotel); perfect accommodation for a group of young people with its casual tatami-room banquet (Enkai) that went on well into midnight.

One of the highlights was Young Summit Forum, held on the last day to summarize and conclude the three-week programme. All participants made presentation on what they had seen, felt and learned in the programme. They found many differences between two countries, of course, in terms of nature, culture, customs, work environment & practice and ways of running companies or projects. In the meantime, however, as one participant pointed out, it was also confirmed that there are many things we



Trip to Kyoto & Nara

AJCE Activity 2007

have in common as consulting engineers who strive to create and maintain better environment and infrastructure for the people. Young Summit Forum offered another opportunity for the participants to discuss two selected issues; (1) Human Resources & Capacity Building, and (2) Living in multi-cultural world. Through active group discussions and presentations, the participants exchanged and shared their experiences and opinions on these interesting topics. Everybody appreciated the opportunity so much that it was recommended by them to include more time for discussions in the future programmes, to which I totally agree.

When YPEP started 12 years ago, it was expected that this programme would help CE firms in two countries develop close business relationships and eventually work together in the international consulting field. So far the outcome in this context is limited, due to the change in business environment. However, now that good partnering in the international market is becoming essential, the network built up through YPEP will surely be a big asset for any Australian or Japanese CE firms that are contemplating further expansion into the ever-growing Asian-Pacific region. In order to make sure this will happen, every participant in YPEP has to recognize the value of the obtained network and keep an effort to maintain and develop it in the future. AJCE will enthusiastically support their effort to do so.

This year YPEP will take place in Australia. We would like to encourage young professionals in both countries to have interest and participate in YPEP, and hope this outstanding programme will contribute to further development of the productive relationship between Australian and Japanese CE industries.



Young Summit Forum



Farewell party

AJCE Activity 2007

Young Professionals Exchange Program (YPEP)



David Murchland
Arup

Outline

The YPEP actually began in July via pre-training dialogue with my host company (CTI Engineering), a very valuable preparation. Once in Tokyo, an AJCE orientation session helped get me settled. Just in time! In the next 3 weeks there was no time to spare, from a day with CTI's

Research Centre for Sustainable Communities, to a visit to the Tohoku region; technical exchanges with the Road & Water Divisions, to an AJCE tour to Kyoto/Nara and the Young Summit to wrap it all up.

Site Visits

Many site visits were kindly arranged by CTI, including to Izawa Dam; to numerous transport infrastructure (Yurikamome, Metropolitan & Gaikan expressways, Umihotaru & the Tokyo Wan Aqua Line, Nissoku Tunnel, and Iroha-zaka); and to CTI's Tsukuba hydraulics laboratory and the Arakawa MLIT centre. Unfortunately a typhoon filled the Metropolitan outer area discharge channel so that I couldn't see it (but at least it worked!).



Ito-san & Wada-san of CTI's RESCO division



Izawa Dam, thanks to Kaburaki-san, Yamashita-san

Technical Exchange

I learnt a lot about roads (both in Japan and Australia!) through the exchange, but it was time with CTI's Water Management & Research Division that really got technical. Four days of presentations from me and CTI covered company and national characteristics/issues, flood forecasting, distributed hydraulic models, environmental flows, water quality improvement, Australian drought characteristics and strategy, natural hazard risk management in Japan, CTIMike11, coupled

river-sewer modeling, real time sewer control systems, hydrological circulation models with GIS, insurance, privatisation, energy strategy & sustainability tools.

Culture

The AJCE group tour to Kyoto and Nara was a wonderful opportunity to understand Japanese history and culture.

Friendship

Thanks especially to Sasaki-san (CTI), and to AJCE for making my time in Japan so memorable!



Kinkaku-ji, thanks to AJCE



Road & Transport Division, thanks to Maeda-san, and Katsuki-san especially



Water Management & Research Division, thanks to Fujiwara-san, Yagami-san ... & everyone else!

AJCE Activity 2007

YPEP 2007 REPORT



Mark Wilson
Costin Roe Consulting

Where to start? The task of condensing the experience of spending three weeks in Japan into a single page is a particularly difficult one. First I would like to express my thanks to The AJCE and The ACEA for giving me this great opportunity and secondly to the people at my host company, IDEA consultants, in particular to Terashima-san, Ogawasan, Hashitani-san and Kobayashi-san, all of who have made my time in Japan both enjoyable on a social level and rewarding in my capacity as a professional engineer.

In my time with IDEA Consultants I have been exposed to many areas of civil engineering and environmental monitoring that I have not before been privy to. These areas include road and river planning, environmental testing and monitoring, meteorological studies, mapping for flood prevention, overseas aid projects through Japans ODA Charter, disaster planning and many others. And although not all that I have learned while in Japan can be directly related to the work I perform in Australia it has all been valuable and interesting information for me to add to my knowledge base. I also believe that the aim of the YPEP 2007 is to obtain an appreciation for not only the technical aspects of the Japanese consulting engineer but also the cultural and social.

It has been great to get an understanding of the constraints and challenges Japanese engineers face when performing design. These may be in the form of natural occurrences such as the consistently occurring earthquakes, typhoons, floods, global warming and even volcanic eruption. Other challenges may come from human activities like a lack of usable space caused by urban buildup or to a lack of natural resources. But these constraints do not appear to limit the scope of the projects that have been performed in the past or those that are currently being constructed. On the contrary these constraints appear to be a catalyst for innovative design in large-scale projects.

The nearly completed New Tomeii Expressway in Shizuoka Prefecture, which I observed during my stay here, is a good example of this point. Through mountainous terrain this expressway, with a design speed of 140km/hr, comprises 40% bridges, 20% tunnels and 40% earthworks over a 400km length. A number of these bridges, which are in the order of 1km in length, have been constructed using composite steel and concrete systems as opposed to conventional concrete box girder systems. Unconventional construction staging has been used to good effect in order to overcome constraints on space and also to reduce costs for both materials and labour.

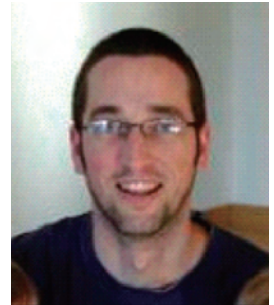
I have enjoyed seeing and learning about the history and culture of Japan and also seeing the natural beauty of the mountain areas, the temples, shrines and the bright lights of the cities, Tokyo in particular. I think that in my three weeks here I have only just begun to scratch the surface of what is a very rich and diverse country. All of these things been highlights of my time in Japan but I think that overall it is the people I have met that have made my time here a memorable experience.

Again I thank all the people for the hospitality shown to me and look forward to returning to Japan sometime in the near future.



AJCE Activity 2007

Summary of YPEP 2007



James Disher
Costin Roe Consulting

The two and a half weeks spent at the Kansai office of Oriental Consultants in Osaka was a fantastic opportunity to experience some of the best of Japanese culture and also provided wonderful opportunities for sightseeing. The time spent in the Kansai office of Oriental Consultants also provided an opportunity to observe Japanese Engineering and learn many things from the experience.

During the time at the Kansai office there were four projects that I participated in. The subject of each of these projects was different, but the process and goals were similar, to research and survey the different topics in order to provide background information for future projects that the company was planning.

The four projects I worked on the Kansai office consisted of sourcing information on Light Rail Transit systems from around the world, various Architects and designers and their body of works, different "Barrier Free" laws and initiatives around the world, and also research into how tourism could be generated in rural areas by using old road systems to attract visitors to the area. Each of these projects highlighted one common aspect of Japanese Engineering which was that Japanese Engineers are very aware of the latest technical developments internationally and not only use these initiatives but also like to build on them and develop the ideas further.

My time spent working in the transportation department in Osaka and the generosity of the people working there gave me a wonderful insight into Japanese culture. The Osaka area is well known throughout the nation as being the "Kitchen of Japan" and the food and drink from the area were amazing. Many traditional foods I had not tried before and simply aren't available in Australia. The local specialties of Takoyaki and Okonomoyaki were

particular favourites of mine. Conducting English lessons during my time in the office was also another highlight. Discussion at these informal lessons included topics like language, cultural identity, sports, popular culture and the like. They allowed an insight into Japanese culture that I don't think would have been possible for a tourist visiting Japan and not interacting with the people as closely.

Osaka also provided an opportunity to travel to some fascinating sightseeing areas. I was fortunate enough to be able to visit places such as Kobe, Himeji, Hiroshima, Miyajima, Takamatsu and Shikoku, as well as Kyoto, Nara and Tokyo. These places, full of both natural beauty and history were different to anything I had experienced before.

My time in Osaka was incredible and I would like to thank all of the people that contributed to making it such a wonderful time. I will never forget the hospitality and openness of the people there. In particular I would like to thank my contact person, Mr Yusuke Kanda and the whole team from the transportation department of Oriental Consultants Kansai office.

I would also like to thank the AJCE for being such gracious hosts of YPEP 2007.



AJCE Activity 2007

Young Professional Exchange Program 2007 Report



Kate Alexander
Maunsell Australia

The Young Professionals Exchange Program (YPEP) 2007 provided me with an opportunity to exchange and compare ideas regarding engineering problems, methods and solutions between Japanese and Australian engineers, as well as between different engineering disciplines. Oriental Consultants and Ms Watatsu planned an interesting training program that enabled me to experience many elements of their business. As a young engineer, the YPEP was an invaluable opportunity for me to experience and understand the roles of various engineering disciplines from many senior and knowledgeable professionals.

During the program, I was based in Oriental Consultants' Tokyo Office. I observed infrastructure and projects in areas including transportation, urban environment, urban planning and landscape. Some of the project highlights that I observed included:

- ◆ *Ohashi Junction*: a large intersection under construction in Shibuya, to connect a new tunnel to the metropolitan Route 3 expressway bridge deck. As the intersection is located close to a residential area, noise reduction techniques were required including fully enclosing the intersection, additional noise barriers and noise-reducing pavement.
- ◆ *Itabashi Yamato-Cho intersection*: Approximately 240,000 vehicles pass through this intersection each day. The intersection has two overpasses, was surrounded by buildings, resulting in little air movement and poor air quality. Measures for improving air quality included jet fans (normally used in tunnels) to move air from the intersection upward, planting of vegetation in the road reserve and demolishing one of the buildings to create a vegetated open space and increase air movement.
- ◆ *Shinjuku Water Recycling Plant*: While this is not a project that Oriental Consultants is involved in, they kindly arranged for me to visit the plant information center. The plant treats combined stormwater and

wastewater to a quality for reuse. The recycled water is provided to various Shinjuku buildings by secondary infrastructure for uses such as flushing toilets.

In addition to observing and discussing projects, I was also able to experience working in Oriental Consultants Office. Oriental Consultants requested that I assist with one of their projects by undertaking research into greenhouse gas emission reduction initiatives around the world, and the greenhouse gas emission reduction policies of various governments post the expiry of the current phase of the Kyoto Protocol in 2012. This research enabled me to better understand the issue of greenhouse gas emissions reductions from an international perspective.



AJCE organised a trip to Kyoto and Nara for those involved in the program to visit culturally significant sites and experience traditional Japanese cuisine and accommodation. This visit enabled the Japanese and Australian engineers to exchange ideas and learn more about the similarities and differences between Japanese and Australian culture.

I would like to thank Oriental Consultants, AJCE and ACEA for making this opportunity possible. I believe that this program has enhanced my professional development and has been an invaluable experience. I look forward to sharing my experiences with my company, Maunsell Australia.

AJCE Activity 2007

YPEP 2007 REPORT



Nathan Scott
OPUS QANTEC McWILLIAM

Participation in the Young Professional Exchange Program promised opportunity; opportunity to travel to a place I had never been before, to experience a culture I had not known and work in an environment totally foreign to me.

Looking back on my three weeks in Japan, I see that as a result of my involvement I have realised all of these benefits... but I have also benefited in other ways that I would not have anticipated. **As a professional engineer, the most compelling benefit of YPEP07 can be summarised in one word – inspiration.**

Over these past three weeks, I have had opportunity to work alongside a group of engineers who have achieved some remarkable feats of engineering. An example of the calibre of engineers that I had opportunity to meet with is found in the case of the Akashi Strait Bridge. On this project, engineers from my host company **Chodai Co Ltd** designed a bridge with a centre span of 1,991m. This bridge is not only the longest span suspension bridge in the world; it is also the tallest (and most expensive) suspension bridge in the world.

Walking the streets of Tokyo, Nagoya and Kyoto I saw buildings and bridges that stretched my understanding of what I considered possible in the world of structural engineering. Different use



of materials and construction techniques have challenged me to re-evaluate my own perceived limitations and think expansively and more creatively about the way I approach structural design.

The cultural experience afforded by YPEP07 has also been invaluable. Experiencing Japanese life as a member of the local community (albeit temporary) is a rare opportunity. **I have found that the best way to understand a culture is to become a part of it.** While the Japanese culture is very different to the Australian culture, we were able to find much common ground. At all times I found my hosts and the community at large to be extremely welcoming, hospitable, friendly and possessing a great sense of humour.

In addition to experiencing the Japanese culture generally, my time at Chodai Co Ltd gave me opportunity to experience the Japanese working culture. The team at Chodai Co Ltd were highly skilled, dedicated and focussed; something that I understand is a hallmark of Japanese Consulting Engineering firms. As far as the working culture was concerned, I observed that while long hours were routine, the office environment was outwardly stress free and quiet. Office structure reflected a highly organised company divided into a number of specialities with clearly defined responsibilities and hierarchies in place.

I expect that the full benefit of my three weeks in Japan will be revealed in the coming months and years of my career as a professional engineer. I intend to approach my career with a new perspective as a result of my broader world view. I also hope to maintain the professional and personal contacts that I have established during YPEP07.

As I prepare to return to Australia, I am grateful to my company Opus Qantec McWilliam, my host company Chodai Co Ltd, and to AJCE and ACEA for the opportunity to participate in this program.

AJCE Activity 2007

Young Professionals Exchange Programme (YPEP) Tokyo October 2007



Robert Spenceley
Simpson Kotzman

Introduction

The 2007 AJCE/ACEA Young Professionals Exchange Programme began on Friday 12 October 2007, with a welcoming ceremony and presentations/introductions at the offices of Oriental Consultants, Tokyo. I was one of six engineers selected from Australia who participated in this programme. I am employed as a mechanical engineer by Melbourne Australia based consulting engineering practice, Simpson Kotzman Pty. Ltd. My employer specialises in building services, and I was fortunate to be hosted in Tokyo by Morimura Sekkei (also known as P.T. Morimura & Associates (PTM)), who provide virtually the same type of service to clients as we do in Australia. PTM with approximately 80 personnel, are larger than Simpson Kotzman which has approximately 40.

Training

People at PTM were extremely warm and welcoming, and went (often a long way) out of their way to accommodate me, in introducing me to their projects and demonstrating how business was practised at their company. I was fortunate enough

to be shown around many projects both completed and in progress, with services designed by PTM. Site visits included the following:

- ◆ fitout at the new Daimaru building adjacent Tokyo Station for a bank client;
- ◆ refurbishment of mechanical equipment at Kamata Tōkyū Plaza;
- ◆ refurbishment of office building (including specialised communications room services) for a bank client in Ogikubo;
- ◆ completed (but not yet fully operational) slurry thermal storage system at the Kawasaki Azalea Station Building;
- ◆ partly constructed, partially fit out Marunouchi (Mori Trust) Building, also adjacent Tokyo Station;
- ◆ completed ice thermal storage plant at Tōkai University, Isehara;
- ◆ guided tour of Shinjuku District Heating and Cooling Plant (largest in the world, services not by PTM).

Each site visit was preceded by a thorough briefing session in the office whereby I was introduced to the types of systems employed for the project, and shown actual calculation data used to arrive at the solutions.

Various contrasts between Australian and Japanese consulting practices became apparent throughout my stay, though they were certainly subtle in the industry in which I had my training. While in Australia we tend to choose equipment and build systems based on previous projects similar in nature, it seems that PTM place a significant emphasis on the design stage of their projects.

The result of this appears to be system designs that are more closely suited to the application than their Australian equivalents, and systems that are often more energy efficient. It is not to say that we pay no attention to design in Australia; indeed at Simpson



AJCE Activity 2007

Kotzman we produce many projects where systems are carefully designed. However, my observations about design suggest a necessity in Japan to consider energy efficiency in a manner that (presumably due to our lower cost of energy) in Australia we are only more recently coming to appreciate. The building industry in Japan certainly seems to suggest that in Australia at present we're playing catch-up with the rest of the world regarding energy consumption.

Based on my limited experience with meetings at PTM, consulting in Japan appears to involve more frequent meetings with clients than we might have at Simpson Kotzman. An upside of this is obviously that projects can be more closely controlled at earlier stages of development, saving potentially costly errors or omissions from discovery later down the track. However the result of this is that staff in the industry are attending meetings during normal working hours, meaning design work takes place outside normal office hours – and once again, this design work is often more detailed than would be standard practice in Australia. Staff at PTM were certainly very hard workers, and their attention to detail really showed through in the quality of their work.

Culture

A homestay was organised for a weekend for me, which my homestay host ensured was both fun and interesting. And PTM staff went to great efforts to make sure I wasn't left to my own resources out

of work hours either, with lunch times, dinners and nomikai all part of the generous hospitality. Part of the programme included a sojourn to Kyoto and Nara on our final full weekend, which meant that fortunately we didn't miss out on seeing (albeit briefly) at least some elements of traditional Japanese culture.

Acknowledgment

I would like to thank all involved with my stay in Japan, for a thoroughly enjoyable and worthwhile experience: staff at ACEA and AJCE ensured our programme ran very smoothly, and I wish to thank PTM for the time and effort they invested in my stay with them. I would especially like to thank the people who went to so much effort helping me understand their projects, and showing me around site, as well as my host for her much appreciated efforts organising both my cultural and technical experience at PTM.



AJCE Activity 2007

KENCA 2007 Professional Engineers Seminar in Jeju Report



Konomu UCHIMURA
Vice President, AJCE

From Nov 09 to 11, I was invited as a speaker for the seminar "2007 Professional Engineers Seminar" in Jeju, Korea hosted by Korea Engineering & Consulting Association (KENCA). Through my presentation and exchange of opinions, I could deepen professional relationship with Korean civil engineers. Mr. John Boyd, the president of FIDIC, and Ir. Ronny Trianggono from VIRAMA KARYA, Indonesia also presented their speeches in the seminar. Mr. Cho, the Chairman of KENCA, about 150 of professional engineers, the representatives affiliated with the association and guest engineers joined the seminar.

KENCA holds the Professional Engineers Seminar once every year which consist of speeches by domestic and foreign guest engineers and business promotion dialogues. KENCA invited the government officials and business partners from 8 countries in Asia and others. I was impressed by Korean engineers' high motivation for promoting overseas business opportunity.

On behalf of AJCE, I presented the speech entitled "Infrastructure Development in Japan and Consulting Engineering Industry" whose contents are as follows:

- ◆ Challenges and prospects of Infrastructure in the decreasing trend of construction investment
- ◆ Importance and changing role of Japanese consulting engineers
- ◆ Present status and challenging issues of consulting industry in Japan
- ◆ Trend of consultant selection in the light of QBS and FIDIC support
- ◆ Future cooperation between Korean and Japanese consultants

I would like to thank KENCA for their heartfelt hospitality to me as well as to, Mr. Yamashita, Secretary-general of AJCE. It was very meaningful that we could promote trustworthy relationship with KENCA secretariat and executives of member companies of KENCA. It is my understanding that establishment of mutual cooperation is important based on accepting the pre-condition of differences in each other's standpoint. I sincerely hope that interaction between Korean and Japanese consultants could be nurtured through participation to ASPAC & TCDPAP Conference being scheduled for April 22-25, 2008 and other exchange programs.

인사니어링 워크숍 및 국제심포지움 International Engineering Sympos

2007. 11. 9 ~ 11 · 주최 : 한국엔지니어링진흥협회 · 장소 : 제주그랜드



Cake Cut at the Welcome Reception of KENCA's Professional Engineers Seminar (from the left: ①Uchimura Vice President of AJCE, ③Mr. Cho, President of KENCA, ④Dr. John Boyd, President of FIDIC)

AJCE Activity 2007

AJCE Annual Seminar 2007



Shigemichi HATAO
Vice President, AJCE

1. The Annual Seminar 2007

The annual seminar is one of the main events of AJCE for continued professional development for the association members. The seminar has usually been initiated by the PDC in cooperation of the other committees such as the international activities committee. The seminar of the year was held on November 20, 2007, with a theme as " Role of Consulting Engineers in the Design-Build Project(DB Project)".

2. Outline of the Seminar of the Year

The seminar consisted of two sessions; one was set to introduce some examples in the DB projects which the member firms experienced in the overseas countries, and the other was to have discussion on the theme in a form of a panel discussion among the presenters and participants. The first session included the following.

- 1) Introduction of an Overview on the Design and Build Contract presented by Mr. R. Fujiwara, Nippon Koei Co., Ltd.



- 2) Design-Build Contact for a cable-stayed bridge in Incheon Bridge Project in Korea by Mr.J. Akimoto, Chodai Co., Ltd.



- 3) Design-Build Contact for a sewerage treatment project in Mexicali City in Mexico by Mr.S.Oniki, NJS Consultants Co., Ltd.



- 4) Design-Built Contracts in Tunnel Projects in UK and Ireland by Mr.T. Sugiyama, Nippon Koei Co., Ltd.



than the presenters, some participants provided some information for the theme, which included introduction of the current trend for implementation of DB projects in Japan by Mr.A.Hirotani, President of AJCE and the views and policy of JBIC to the DB contracts in the ODA loan projects by Mr. T. Miyao, Director of JBIC. An unique experience was introduced by Mr. Y.Takemura, a committee member of PDC, who joined a reconstruction project of a Buddhism temple.

3. Some Remarks of the Seminar

It is an increasing trend in the world that design-build contract is applied for construction of infrastructures. While many infrastructure have been traditionally implemented under a design-bid-construction contract, due and more attention should be addressed to the DB contract system by the consulting engineers. This issue was also taken up for discussion at the recent FIDIC annual conferences. Therefore it was quite timely to have held the seminar with a focus on the issue. The participants to the seminar numbered more than 90, which was much more than in the past seminars. There are several possible roles for consulting engineers to participate in the design-build contract, such as an advisor to the implementing agency or the SPC, a joint member of EPC contractor or a subcontractor to the EPC contractor as a designer. Some of the major concerns for the consultants might be contractual position, risk share and amount of fee when they join the DB Projects. It is also a key issue how to maintain the presence of the consulting engineer in the DB projects.

In the first session, very useful information and practices were presented, such as risk allocation, procedure and responsibility of design change, difference of the specifications in English and Spanish versions, etc. In the Incheon bridge project, the consultant participated in design work and construction supervision with the contract with the developer(SPC). In this example process and procedure for the design checking was introduced. For the sewerage project in Mexico under the JBIC loan, the consultant was employed as an in-house consultant to the implementing agency for preparation of tender design and construction supervision. Experiences in the tunnel construction projects in UK and Ireland were reported, in which the Japanese contractor participated as an EPC contractor, and some useful information and lessons for consultants or design engineers were provided. The second session of the seminar was made under a panel discussion among the above presenters, with the chairman of PDC as a moderator. In this panel discussion, more information were provided on the executing mode and role and duty contractual position of the consultant in the DB projects. Other



AJCE Yearly Activity 2007 at a glance

	January	February	March	April	May	June	July	August	September	October	November	December
Seminar Conference			<p>3/20-22 ASPAC/TCDPAP Annual Conference 2007 [p6]</p>			<p>6/30 AJCE-YPG Seminar</p>	<p>7/13 FIDIC Redbook (MDB Edi.) Seminar [p8]</p>	<p>9/9-9/13 FIDIC 2007 Singapore Conference</p>	<p>10/5 Seminar of Reporting FIDIC Annual Conference</p>	<p>11/20 AJCE Annual Seminar "Role of Consulting Engineers in the Design-Build Projects" [p20]</p>	<p>12/7 Professional Career Development Seminar</p>	
Training Program	<p>AJCE Visited Australia, United Kingdom and USA</p>		<p>Nihon Suido Consultants Conference room "Report of ISCE YPF Seminar" "FIDIC-YPF, FIDIC-YPMTP, AJCE-YPG"</p>		<p>AJCE participants:33</p>		<p>Joint meeting between FIDIC/JBIC/AJCE Mr. Iijima Director General of JBIC shake hand with president Boyd.</p>		<p>Nippon Koei Conference room Number of participants:100</p>		<p>Presentation by Mr. Taisuke Miyao JBIC Director</p>	
Research	<p>Research on the Current Status of Design-Build Projects</p>					<p>Research on QBS through FIDIC MAs</p>						
Others	<p>1/10 New Year Celebration Party</p>		<p>3/13 Extra General Assembly Meeting</p>	<p>4/26 Guests from FIDIC</p>	<p>5/15 General Assembly Meeting</p>	<p>Left: Gregs Thomopulos FIDIC EC Right: Richard Stump: FIDIC YPF Chair</p>		<p>CTI Engineering Conference room Title "Mechatronics" "Update of global environment in EU" "Risk assessment"</p>				
Publication				<p>Bulletin Vol.30 No.3 News Letter Vol.28</p>				<p>Bulletin Vol.31 No.1</p>			<p>Bulletin Vol.31 No.2</p>	
AJCE Executive Committee Meeting		<p>2/13</p>		<p>4/10</p>		<p>6/11</p>		<p>8/7</p>	<p>10/9</p>			