

Changing the Roles of Japanese Consulting Engineers



Tokuji TOMARU, Dr. Eng.
President, AJCE

The Association of Japanese Consulting Engineers (AJCE) was established in 1974, and celebrates its 30th anniversary this year. Since the establishment, AJCE has been making efforts to promote consulting engineers activities and to heighten their *raison d'etre*. On this good occasion, we are planning to hold a symposium to discuss the consulting engineer's role in Japan. The development of the social infrastructure in Japan has been historically carried out by the central government which has its ability and budget based on the legal system. It was only about 50 years ago that the government began to outsource construction and engineering works for the projects to construction contractors and consultants. Since then consulting engineers have been invited and involved in the upstream jobs and design works of the projects planned by the government. But their roles were limited to the very small extent of jobs, such as data collection, calculation, analysis, drafting and so on, as supporting parties who had no right to judge the feasibility and adaptability of the projects.

The drastic progress of Japanese economy in 1950's and 1960's depended mostly on the high speed development of social infrastructure conducted by the powerful central government. Japanese people are now enjoying affluent life. We can say that the implementation system of infrastructure development has been functioning very well.

The more infrastructures have been developed

and the more the level of our life has become high and affluent, the more the people come to criticize such basic infrastructure projects as roads, river improvement and dam projects necessary for their daily life. They have become interested in rather the preservation and restoration of the natural environment than the development of the infrastructures. Furthermore, after the burst of bubble economy in 1990's, the central government couldn't allocate enough budgets and staffs for the infrastructure development and now intends to introduce private ability, know-how and finance to these projects.

Under these circumstances, consulting engineer's roles are expected to change into independent, impartial and responsible differing from the past supporting parties. There are several hurdles to clear in order to realize this real consulting engineer's roles. One of them is the Japanese legal system. It is true that the government is primarily responsible for the development of infrastructures, which employed many excellent engineers with high level know-how and skills. But the social situation is changing and not only government but also the people are expecting and welcoming private power and ability.

The time has come when our consulting engineer's should play the important and major role in the process of the infrastructure development. We, consulting engineers, are now not the supporters but main players in the society.

Opinion of AJCE - Introduction of Objectives and Activities of AJCE Committees -

Objectives of AJCE have been realized through activities planned and steered by its standing committees. Members of each committee have been participating on a voluntary basis, and this will be the case in the future. This article describes the objectives and activities of the committees as the first step to address AJCE's opinion. Two committees selected to represent the AJCE are the International Activity Committee (IAC) and the Professional Training Committee (PTC). These two are playing their roles most actively among AJCE's standing committees. In addition, six members of the two committees, four of IAC (Hirofumi, Kurashige, Fujikura and Sakurai) and two of PTC (Yamashita and Sasabe) are also actively participating in FIDIC committees activities. There are five sub-committees (SC) and one working group (WG) under IAC and four SCs under PTC corresponding to FIDIC task forces, and each has a unique role. Objectives and activities of the four SCs and one WG of IAC are presented in Section 1, followed by a description of those of PTC and its SC in Section 2.

1. International Activity Committee (IAC)

Terms of Reference (TOR) for the committee include the following, and these are general objectives of its sub-committees:

- (1) Cooperation with FIDIC's activities
- (2) Exchange of information with other member associations
- (3) Provision of information to Japanese consulting engineers
- (4) Dispatch abroad information about Japanese engineers

1.1 ASPAC Sub-Committee (ASPAC-SC)

1.1.1 Roles and Activities

In 2001, after the appointment of Dr. Ishii as the ASPAC chairman, who was AJCE Chairman at that time, ASPAC-SC was established. Based on the ASPAC's TOR, AJCE assigned a role for ASPAC Secretariat, and ASPAC-SC assumed a responsibility for achieving such a role. As ASPAC secretariat, ASPAC-SC prepares materials and proceedings for the ASPAC GM which is held once a year, and for the ASPAC EMC twice a year. In addition, ASPAC-SC has been conducting the following activities.

(1) ASPAC News

For each ASPAC MA, "ASPAC News" has been released on the FIDIC Home Page for the purpose of information distribution.

(2) Information Exchange with International Organization(s)

Information exchange and instructor dispatch for UN Technical Consultancy Development Program for Asia and the Pacific (TCDPAP) was conducted.

(3) Development of the Information Exchange System

For the purpose of achieving real-time information exchange amongst ASPAC MAs, ASPAC-SC had been evaluating the information exchange system on an electronic message board which can be written on the Home Page. ASPAC-SC developed the independently operable system in 2003, and is currently requesting the creation of the link on the FIDIC Headquarters Home Page. If this system can be accessible via FIDIC Headquarters Home Page, information exchange amongst ASPAC MAs will be promoted, and expected to be a suitable tool for resolving the various issues specific with ASPAC.

1.1.2 Issues to be Addressed

During the FIDIC Annual Conference in 2003, due to the replacement of ASPAC chairman, ASPAC Secretariat was taken over by ACES, Singapore MA. Compared to other regional groups of FIDIC, ASPAC's activity has been hardly to say active, nevertheless ASPAC-SC's contribution to enhance in recent years. Thus it is necessary to make further improvement. ASPAC particularly holds structural issues such as widely scattered participant MAs, large gap in national conditions among MAs, etc., so it is necessary to determine the direction for reinforcement. Division of ASPAC into multiple sub-regional groups may be considered in this respect.

1.2 Business Integrity Management System Sub-Committee (BIMS-SC)

1.2.1 Objectives

AJCE has been supporting the anti-corruption stance of FIDIC since the 1995 Istanbul Conference. In accord with this policy, BIMS-SC was set up in 2000 within IAC. The major objective of this sub-

committee is to study FIDIC publications and policies on integrity and anti-corruption in the consulting engineering industry and to introduce BIMS in Japan to peers, clients and other concerned parties.

1.2.2 Activities

In 2001 before the FIDIC Montreux Conference, Mr. Stan Kawaguchi (EC), a member of the FIDIC Integrity Management Task Force, was kind enough to hold a BIMS Seminar for AJCE in Tokyo. BIMS was widely presented to AJCE members through an introduction of the system, including a summary of the BIMS Seminar, published in the July 2001 edition of AJCE bulletin. "Guidelines for Business Integrity Management in the Consulting Engineering Industry (Test Edition)" was published later in 2001 and was translated into Japanese by members of the BIMS-SC supported by other members of IAC.

In 2002, before the FIDIC Acapulco Conference, AJCE approached the Japanese Ministry of Land, Infrastructure and Transport as well as the Japan International Co-operation Agency (JICA) and the Japan Bank for International Co-operation (JBIC) to introduce and explain the aims of BIMS. Also, in 2003 just before the Paris Conference, FIDIC President Mr. E.S. Pedersen and AJCE Vice President Mr. Akihiko Hirotsu made visits to JBIC and other governmental offices to promote FIDIC activities including BIMS. In continuing our efforts to introduce BIMS in Japan, we are now finishing the Japanese translation of the "Business Integrity Management System Training Manual (First Edition 2002)" and the translations of both the BIMS Guidelines and Training Manual should be ready for publication shortly. Also, AJCE is planning for a seminar to discuss integrity and anti-corruption to further deepen our understanding of the issue.

BIMS is basically a system for compliance to anti-corruption policies; therefore, we feel that it is feasible to presume that a practical approach in many industrialized countries is to adapt BIMS into a system for developing compliance checks for related laws and regulations. In Japan, anti-trust laws are of major concern, but a system flexible enough to incorporate any type of anti-corruption law or regulation should be useful to many consulting firms worldwide. We look forward to discussing this possibility further within AJCE and introducing any positive comments to FIDIC and other interested parties in the future.

1.3 Quality Based Selection Sub-Committee (QBS-SC)

1.3.1 Previous QBS Task Force (QBS-TF) and Its Reform to Sub-Committee

Despite past achievements in promoting the implementation of QBS for consulting services, the ADB changed its method for selection of consultants from QBS to QCBS. This change would have negative impacts on the business of Japanese consultant firms to participate in ADB funded projects. As soon as AJCE noticed that ADB would change its policy, it established QBS-TF in 2002 with limited TOR to analyze the impact of QCBS and provide timely comments or requests to ADB. QBS-TF performed the activities mentioned below until March 2003 and terminated its TOR. Then AJCE decided to reform QBS-TF to QBS-SC since its existence is considered to be necessary on a continuous basis as the objectives and the activities became more important.

1.3.2 Efforts by Previous QBS-TF

(1) Support FIDIC for the Preparation of the Guidelines

QBS-TF prepared AJCE's comments on "FIDIC Guidelines for the Selection of Consultants". We sent comments to FIDIC QBS-TF several times regarding mainly "importance of TOR", "weight of cost evaluation", and "necessity of monitoring and consideration of project life-cycle-cost". Intensive discussions were maintained among members to collect thoughts on these matters. We appreciate that the FIDIC Task Force reflected our comments in the final version.

(2) Action to ADB

Appeal to ADB against QCBS together with two Japanese consultants associations, viz. Engineering Consulting Firms Association (ECFA) and Infrastructure Development Institute (IDI), in July 2002 insisting that QBS should be the recommended and preferred selection method for consultancy services. We also requested ADB to monitor and publicize the evaluation results.

In November 2002, we sent a letter to ADB stating that three Japanese consultants associations, viz. ECFA, IDI and AJCE stand ready to support ADB's monitoring.

In February 2003, we participated in the ADB seminar, and submitted the monitoring plan (draft) for their review.

1.3.3 Activities

Since the reform, QBS-SC has been actively playing its role with the current action plan mentioned as follows.

(1) Communication with ADB

To send our comments or requests concerned with selection results and to obtain results of monitoring

- (2) Study on domestic or overseas selection methods to maintain the professional services
(3) Cooperation with the other 3 Japanese associations

1.4 Capacity Building Sub-Committee (CB-SC)

1.4.1 Objectives

CB-SC was established in 2003 having prospective main objectives as follows:

- (1) Disseminate information of FIDIC Capacity Building Task Force (CB-TF) including an introduction of related FIDIC documents to AJCE member firms and other parties concerned in the construction industry in Japan.
(2) Cooperate with other professional associations of consulting engineers in Japan for the promotion of capacity building and development.
(3) Cooperate with FIDIC and other MAs for promotion of capacity building, including the benchmarking system, etc.

1.4.2 Activities

To start the activity of CB-SC, firstly, it was necessary to review in detail the purposes, present activities, and situation of CB-TF then discussed with CB-TF members at the FIDIC '03 Annual Conference in Paris. It was obvious that the importance of CB is not only for consulting industry of developing countries but also of developed countries. Upon return from FIDIC '03, discussions were made at IAC / AJCE on what and how the practical as well as useful activities that shall be undertaken by CB-SC thus itemized the possible activities as follows:

- (1) Research and translate as necessary the important documents including materials of FIDIC regarding CB in order to inform, broaden and assist the CB activities to the Japanese consulting industry for their effort on capacity building / development.
(2) Hold seminars and other discussions to identify the problem area in consulting industry as well as consulting engineers of Japan and work on their capacity building /development.
(3) Participate in FIDIC CB-TF activities to study, promote and carry out further development on the CB activities in cooperation with other MA members.
(4) Report and discuss with the FIDIC and MAs regarding CB activities of Japan and obtain their comments for the further development of CB activities in Japan.

IAC/AJCE feels that CB should be placed as one of

the urgently important issues among FIDIC activities. We hope our CB-SC will be usefully active in the development of the CB program with FIDIC and also for the development of CB activities of Japanese consulting engineers who would enhance and assist the CB for the engineers of developing countries through international cooperation projects or technical assistance programs. We appreciate very much any suggestion, advice and comments on our CB-SC activities.

1.5 Quality of Construction Working Group (QoC-WG)

1.5.1 Objectives and Activities

AJCE supports the FIDIC QoC-Task Force (QoC-TF) within the FIDIC Business Practice Committee (BPC). QoC-WG is responsible for preparation of QoC Guidelines within AJCE.

FIDIC BPC was established at the Hawaii Conference in 2000 and assigned various tasks to each member of the committee. QoC-TF was established at the same time and joined by Akihiko Hirotsu, Japan (Chair), Jean Felix, France, Alan Green, Canada, Xie Shaozhang, China, Akira Shiroya, Japan and Peter Silbernagl, South Africa. AJCE QoC-WG was also established soon after to support the activities of QoC-TF. AJCE QoC-WG has since been very active, while conferring with other QoC-TF members. It is responsible for supporting the preparation of QoC Guidelines at various stages starting from the implementation of FIDIC survey to verify the extent of problems, preparation of QoC Guidelines draft and updating them. The QoC Guidelines are at the final stage of preparation after being recognized by the FIDIC 2004 January ECM and now ready to be reviewed before printing.

The Guidelines are prepared with the background information as follows (some excerpt from FIDIC Policy on QoC);

"The survey on Quality of Construction by FIDIC within Member Associations in 2001 confirmed that failure to achieve appropriate Quality of Construction is a problem worldwide. The pressure to reduce the initial costs of construction and supervision were found to have had an adverse effect on quality, as could be predicted. The problem is serious and is evident in both developed and developing countries. Within the conventional processes for the procurement of construction contract, contractors, who are keen to win tenders, can do so by submitting low prices, but at the risk of not being able to produce construction work, which fulfils the specification or

meets sustainable standards. Likewise, consultants may be under pressure to reduce the initial cost of construction and construction supervision so that contractors are not able to produce the required quality. Lack of quality in construction is manifested in poor or non-sustainable workmanship, and unsafe structures, and in delays, cost overruns and disputes in construction contracts. Consultants are often appointed by a client for a partial service only during construction. This increases the risks to the client and the consultant with respect to the quality and safety of construction, and frequently increases the overall cost of the project when account is taken of delays and disputes. Longer-term costs such as increased maintenance will also be incurred. FIDIC wishes to take a leading role in working with other stakeholders to address this potentially serious problem."

Actual FIDIC POLICY at the moment is drafted as follow (some excerpt from the FIDC Policy-Draft);

"FIDIC believes that construction should be sustainable, and to this end, it is the policy of FIDIC that each party in the construction process should be committed to satisfying its obligations in respect to achieving Quality of Construction. The Guide for Quality of Construction recommends a Best Practice approach to achieving proper Quality of Construction and Action to be taken by each party concerned: i.e. by government, by international financing agencies and by industry. Engineering is not value-free and hence the approach that organizations take in solving problems is influenced strongly by the values and beliefs they hold. Values and beliefs drive attitude and behavior, and thus outcomes."

QoC-WG is proud of itself in supporting the preparation of QoC Guidelines which is an important activity of FIDIC QoC-TF.

2. Professional Training Committee

2.1 General Objectives

The Professional Training Committee (PTC) is composed of PTC Management Board and 4 sub-committees; Activities & Seminars Promotion sub-committee, FIDIC Policy Promotion sub-committee, Professional Career Development sub-committee and FIDIC-YPF sub-committee. PTC aims to promote activities of AJCE and to support those of FIDIC by planning and implementing various programs as described below.

2.2 PTC Management Board

PTC Management Board discusses and decides PTC policy matters such as TOR and action plans of sub-

committees, and represents PTC in planning, adjusting and carrying out AJCE activities. The biggest mission of PTC in 2004 is to plan and implement AJCE 30th anniversary symposium in May.

2.3 Activities & Seminar Promotion Sub-Committee (ASP-SC)

ASP-SC has been initiating AJCE annual seminars, FIDIC conference report seminars, and planning & implementing Young Professionals Exchange Program (YPEP) between AJCE, ACEA and ACENZ in close collaboration with YPF-YPEP-SC (refer to Section 2.6 of this article). Theme of the 2003 AJCE annual seminar was "Prospect of Japanese Consulting Engineers in Global Market - A new challenge". Keynote speakers were invited from EBRD and a member firm (PFI expert) following panel discussions. Issues such as low share of Japanese consulting engineers in IFI projects- background, obstacles and the ways to increase share; new business development in PFI projects; collaboration with foreign consulting engineers: difference in procurement between domestic and oversea projects, etc. were discussed. The sub-committee also held a seminar on 2003 FIDIC conference for AJCE members.

2.4 FIDIC Policy Sub-Committee (FP-SC)

FP-SC planned and implemented a session in the Third World Water Forum (WWF3) held in Kyoto, March 2003 titled "Sustainable and Secure Water Delivery and Flood Control Systems". The session in collaboration with FIDIC was chaired by Dr. Ishii. Preparation of the WWF3 started by following the decision made at 2002 Montreaux ECM. Former president Mr. Eigil S. Pedersen presented the keynote speech and contributed valuable opinions in the panel discussion which was moderated by Mr. Stanley Kawaguchi. Our proposed keywords "Capacity Building" and "Technology Transfer" were reflected in the final Ministerial Declaration. Mr. Pedersen was invited as one of the panelists in the plenary session to represent views of CEs in solving world water problems. The AJCE-FIDIC session was carried out in great success, attended by overflowing participants and vigorous exchange of opinions. In addition to WWF3 involvement, the sub-committee has been translating FIDIC SD-TF report "a unique capacity to address priorities". It will be finalized and published after permission of FIDIC to AJCE members as well as to Japanese consulting engineers in 2004. At the meeting held in Dec. 2003, the sub-committee decided to follow up with the FIDIC SD-TF's indicator report.

2.5 Professional Career Development Sub-Committee (PCD-SC)

PCD-SC focuses its activity to promote Continuous Professional Development (CPD) among AJCE members as well as to outside consulting engineers. Three CPD seminars were held in 2003, i.e. "Three-parties-structure in public works procurement and delivery in Japan", "Comparative case studies of procurement in developed countries", and "Energy saving and cost effective renovation business". In 2002, the sub-committee held a colloquy with academic and professional experts on "Examination of management business, e.g. CM & PM in public works projects and future prospects in Japan" after which the outcome of the discussion was reported in AJCE bulletin. Three CPD seminars are being planned for 2004.

2.6 Young Professionals Forum and Young Professionals Exchange Program Sub-Committee (YPF-YPEP-SC)

2.6.1 Objectives

We are all concerned that young members of the Consulting Associations are not very actively participating in activities of their own Associations. Promotion of young professionals' participation in the activities of the Association through creation of opportunities to exchange their opinions, concerns, and visions, and eventual vitalization of the Consulting Engineering Industry is now an urgent issue.

AJCE has been conducting various efforts in order to promote the participation of young professionals in our activities. YPF-YPEP-SC under PTC is in charge of this task. Activities included are; study on activities of FIDIC by FIDIC Study Group; promotion of mutual understanding by young professionals through Young Professionals Exchange Program (YPEP) between Japan, Australia and New Zealand; support of FIDIC-YPF for the vitalization of FIDIC as a whole; and, holding of periodical internal seminars to raise capacity of young professionals.

2.6.2 Young Professionals Exchange Program (YPEP)

YPEP commenced in 1996 as a result of a Memorandum of Understanding signed between AJCE and ACEA (Australia) in October 1995 to facilitate closer ties between the Associations. YPEP is an annual exchange program of young professionals between Japan and Australia. The young professionals undertake a three-four week training program that includes technical, social and cultural activities. The general principle behind YPEP is that "cooperation between organizations, and

business between companies could grow from friendship between individuals", with the exchange program a way to promote long term friendships.

During the first three years of its operation, there were two-way exchanges each year between Japan and Australia. Since 1999 exchanges between Japan and Australia have taken place in alternate years to ensure long term sustainability of the program. ACENZ (New Zealand) also joined the program in 1999, 2000, and 2001. The aims of YPEP include; i) cross-cultural experience through home-stay; ii) training in technical and operational aspects of the hosting companies; and, iii) learning and experiencing each other's business and social cultures. The number of participants to YPEP from 1996-2003 amounts to a total of 75. The program is steadily accumulating positive results for the relevant associations.

2.6.3 Young Professionals Forum (YPF)

Another major activity of AJCE for the young professionals is the support of FIDIC-YPF. The requirements mentioned above, promotion of young professionals' participation and eventual vitalization of the whole organization, are those also for FIDIC. For these, General Round-table Session for Young Engineers was held in FIDIC 2000 in Hawaii, and establishment of "FIDIC Young Forum" was proposed for opinion exchange among young engineers. In FIDIC 2001 Montreux, a discussion was held for the realization of the Young Forum, and the start of FIDIC YPF was announced at GAM. TOR and Action Plan were discussed in FIDIC 2002 Acapulco, and the TOR was approved in the EC Meeting in January 2003.

YPF-YPEP-SC has strongly been supporting the activities of FIDIC-YPF from the start at the Hawaii Conference. FIDIC YPF is now in a stage to promote actual activities through the participation of the real young. In 2003, YPF-YPEP-SC supported FIDIC-YPF in the Paris Conference. For the realization of web-based discussion environment as proposed in the action plan, YPF-YPEP-SC prepared a draft of FIDIC-YPF Web Page. FIDIC Secretariat prepared a trial version based on the proposal by the YPF-YPEP-SC. Paris YPF meeting was successful in realizing presentation from young professionals and fruitful discussion among them. Now is the stage to utilize the web-environment discussion tool, and YPF-YPEP-SC is strongly supporting it.

Opinion of AJCE:List of Authors

Titles	Authors
Introduction of Objectives and Activities of AJCE Committees	Masafumi MIYAMOTO (Vice- Chairperson of IAC)
ASPAC Sub-Committee	Takeya ISOBE (Chairperson of ASPAC Sub-Committee)
Business Integrity Management System Sub-Committee	Shinichiro FUJIKURA (Chairperson of BIMS Sub-Committee)
Quality Based Selection Sub-Committee	Eiji KAWAKAMI (Chairperson of QBS Sub-Committee)
Capacity Building Sub-Committee	Hajime SAKURAI (Chairperson of CB Sub-Committee)
Quality of Construction Working Group	Akihiko HIROTANI (AJCE Vice- President / Chairperson of IAC)
Professional Training Committee	Yoshihiko YAMASHITA (Vice- Chairperson of PTC)
Activities & Seminar Promotion Sub-Committee	
FIDIC Policy Sub-Committee	
Professional Career Development Sub-Committee	
YPF-YPEP Sub-Committee	Keiji Sasabe (Chairperson of YPF-YPEP Sub-Committee)
The editorial cooperater	Toshio KURASHIGE (Vice -Chairperson of IAC)

AJCE/ACEA

Young Professionals Exchange Program Reports 2003

Young Professionals Exchange Program (YPEP) 2003



Keiji SASABE

Chairperson of the YPF · YPEP Sub-Committee

Outline of Young Professionals Exchange Program (YPEP) is explained under the article of YPF-YPEP Sub-Committee of this News Letter. YPEP 2003 was held for a four-week period from October 5 to November 2, and seven Japanese young professionals visited Australia and had valuable experiences. Host companies in Australia and the Japanese companies that the trainees belong are as follows: Cardono MBK - Oriental Consultants, Douglas Partners - OYO International, SMEC - NIKKEN Consultants / PCI, GHD - CTI, Steensen Varming - MORIMURA, Hyder Consulting - CHODAI.

After come back to Japan, every trainee reported that

his or her experience was really valuable in the meaning of cross-cultural experiencing through home-stay, knowing of Australian culture in the business practice and way of living, etc. A new program "Young Professionals' Project" was introduced in YPEP 2003 in order to obtain more concrete outcome. The purpose of the Project was learning to understand business practice differences in Australian and Japan. Trainees were given tasks during the Program to study proposal and BID preparation process. The accomplishment of each trainee was presented in Young Summit held at the end of the Program. YPEP is steadily getting concrete outcome for both Japan and Australia.

Young Professionals Exchange Program 2003 in Australia



Takashi HARA
Engineering Geologist
OYO International Corporation

1. Introduction

I participated in the Young Professionals Exchange Program, an exchange-training program that has been held for the past eight years and sponsored by consultant engineering associations from Australia, New Zealand, and Japan. The participants were seven young engineers from consultant companies in Japan, specializing in different respective fields. We were going to train in Australia for a total of four weeks but, to our regret, were unable to have the chance to visit New Zealand this time. The purpose of the exchange program is to broaden our horizons through the international exchange of young engineering professionals and to deepen the mutual understanding between our countries. In addition, the comparison and research of typical Japanese and Australian proposals and respective competitive bidding matters were also studied. I was also especially interested in studying advanced hazard/risk assessment in Australia, and I had the opportunity to participate in such training.

2. Host Company

My host company was Douglas Partners Pty Ltd. (hereafter referred to as DP) in Australia. DP is primarily based in Australia, and is an engineering consultancy specializing in the fields of geotechnics, environment, and groundwater. DP handles projects not only in Australia but also in other countries, particularly in Southeast Asia. I had the opportunity to study in the Sydney office for two weeks and in the Newcastle office for two weeks.

3. Training Program

(1) Training in DP

I had the opportunity to visit some project sites during the training program with DP. These projects were in construction sites and developed land, and consisted mainly of consultation on ground condition, cut slope stability, and ground pollution. Ground

conditions at each construction progress step were evaluated and some comments and proposals were given. The 1-2 reports with sketches were written on site and submitted to the client. Having been shown the sites, I was very interested in rock excavation. The Mesozoic sandstone layer is found throughout Sydney and the surrounding areas. The cut slope on construction was almost vertical, although there was one where some inclinations were applied on the slope road. A huge disk rock cutter was used to make the slope. For me, it was the first time to see such heavy equipment. The idea of the cut slope counter measures was also interesting. A counter measure is only applied to unstable places. So, when shot-crete is given to one slope, it is not applied to healthy slopes in that spot, creating a kind of patchwork on the cut slope. It thought it was a reasonable method, although the externals were not so good.

In the office, I had the chance to inspect reports of the risk assessment of landslides and falling rock collapse, which was a concern before visiting Australia. Guidelines concerning the risk hazard assessment of a lot of fields have already been set in Australia. Efforts have been made to decrease the



Rockcutter

differences in the results as much as possible, depending on the engineer who executes the work, and have been made clear the process of the work. As this field is now also being actively developed by Japan, this experience was beneficial to me. I also inspected the original business guidelines and reports of past projects. The business guidelines detailed the procedures in each type of project, from receiving the business offer to submitting the final report, though it is a matter of course for ISO acquisition enterprises. The guidelines were easy to use for the staff. In particular, the proposal preparation manual was designed so that anyone could easily and immediately submit a proposal, including budget, to the client. I thought that this was very important.

(2) Weekend Activities

Every Saturday, we participated in ACEA sponsored activities, including horse riding, trekking in the Blue Mountains and the Jenolan cave, and dolphin watching. I will always cherish the memories of these wonderful experiences. Our training period in Australia coincided with the hosting of the rugby World Cup, and DP arranged for tickets to the Japan vs. USA match for us. The game was good, and I cheered vigorously, though, to our regret, Japan lost by a narrow margin.

(3) Afternoon Drink

"Afternoon Drink" was a weekly event sponsored by the host companys. Every Friday evening, we could exchange information and deepen friendships with experts from many fields. Moreover, it was a good situation for the Japanese participants to talk to and mingle with our hosts from Australia.

(4) Young Summit

On the final Friday, we held the "Young Summit," in which we presented what we had learned in the program and discussed our presentations with other young professional engineers from Australia. The subject of the presentation was: "Comparison between the proposal of Japan and Australia and competitive biddings." Everyone had been informed before arriving in Australia of his respective host company, and each Japanese trainee gave such a presentation. Because the agenda was clear, engineers from both Japan and Australia found it easy to discuss, and we had an animated discussion in the summit. The discussion about the insurance system concerning the design and specifications of the project was especially lively.

4. Home Stay

I had an exciting experience everyday through the

home stay program, staying with two families in Sydney and with three families in Newcastle. I was very satisfied with Australian lifestyle, customs, and cuisine. Actually, I enjoyed playing canoe on the beach with surfers before work. I had a chance to eat not only Australian cuisine, but also Indian and Malaysian food when some engineers from DP invited me to dinner. On the weekends, I enjoyed swimming and camping on the beautiful beaches and bushwalking in the national parks. Since I was free to decide my own schedule, I had time to go sightseeing in the city, too.

5. Impression

Though I had made many plans before leaving Australia, the training period was not long enough to do everything I wanted. Therefore, I must go back to Australia again in the future. I experienced life and work in Australia through the home stay program, and I was interested in the differences between Japanese and Australian lifestyles. As I had imagined, the Australian approach to work is significantly different than that of Japan. Work is often the center of one's life in Japan, while in Australia family and private time is usually the center. Therefore, Australians strike a proper balance between work and private life. I strongly felt that I should learn to do this.

6. Acknowledgement

First, I would like to express my thanks to all persons and parties involved in this exchange program. Particularly, I would like to give many thanks to Mr. Allan McConnell and Ms. Mina Hayashi in ACEA, who organized and arranged our stay in Australia, and to Mr. Goro Fujie, Mr. Hiroto Tachibana, and the members of the Young Professionals Forum committee in AJCE, who gave me the opportunity to experience this program and who took care of the Japanese trainees throughout the program. Through their hard work, this program was a success. And, most definitely, I am very indebted to DP and to the DP Newcastle branch. They treated me very kindly and friendly throughout my training program, even though their own schedules were very busy. I deeply appreciate: Mr. Michael Thom, who was my host family in Sydney and who took care of me both officially and privately; Mr. John Braybrooke, who was also my host family in Sydney, and who gave me a lot of good advice and suggestions for my career; Mr. John Harvey, who organized and arranged my training program in the DP Newcastle office; Mr. John Niland, who was my main host family in Newcastle and who treated me like an old friend; and all the other staff of DP and the DP Newcastle office, their families and their friends.

CONSULTING ENGINEERS TRAINING FOR THE GLOBAL MARKET



Stanley, KAWAGUCHI

FIDIC former Executive Committee Member

In a short six month period spanning September 2000 to April 2001, two significant activities took place involving the training of consulting engineers to meet the challenges of the global market.

In September 2000 during FIDIC's Annual Meeting, which was held in Honolulu, Hawaii, the younger members of FIDIC decided to establish a Young Professionals Forum or YPF.

Then in April 2001, FIDIC together with China's prestigious Tsinghua University in Beijing, and the China National Association of Engineering Consultants (CNAEC), jointly established a training center on the campus of Tsinghua University. This training center is more commonly referred to as the FTC Training Center, in recognition of its original founder organizations.

THE CHANGING ROLE OF CONSULTING ENGINEERS

Both the YPF and FTC are about FIDIC's long standing interest in CAPACITY BUILDING - a major challenge that faces our industry in today's global market. However, this interest is not just in the building of basic capacity, but rather in elevating the private practice of engineering to a level where consulting engineers are increasingly recognized by our worldwide society as leaders and creators of wealth in society.

In 1998, FIDIC issued a report on the future of consulting engineering. This was the Task Force 21 Report, which was entitled "Engineering Our Future". The contents and direction of this report about the future of consulting engineering worldwide are very clear - it is to **PROVIDE LEADERSHIP AND BE PROACTIVE.**

Our global consulting engineering industry is in a

period of profound change. This is nothing new as our industry has always been on the leading edge of progress. However, the distinguishing feature of the current round of change is that the rate of change is increasing and the scope of change is all encompassing.

Major and accelerating technological advances in computing sophistication and power, communications initiatives, and the dynamic growth of the market economy are all part of the comprehensive set of forces currently affecting our industry.

It is in this type of business environment that the private consulting engineer is being called upon to play a larger and more inclusive role as projects become more comprehensive and clients look for innovative ways to deliver their projects within time and budget constraints.

Consulting engineers are being asked to assume a larger role in new project delivery systems, to be accountable for total project delivery, and to seek ways to protect and enhance the natural and social environment, while at the same time protecting the client's interests.

Today's consulting engineers are being called upon to take on the role of program managers and facilitators responsible for a broad scope of services. Many other disciplines (scientists, biologists, architects, planners, archaeologists, social scientists, financial experts, etc.) are now part of the staffs of consulting engineering firms.

We are being asked to do more than just design bridges, buildings and other infrastructure. We are being asked to conceive, plan, program, design, supervise, arrange financing, maintain and operate facilities.

This more comprehensive role requires that today's consulting engineers, in addition to being professional engineers, must be excellent business people who are knowledgeable on a wider range of issues. In other words, consulting engineers today must respond to ever changing market needs and be prepared to offer the clients what they ask for.

THE CHALLENGE

At the 1998 Edmonton meeting, then FIDIC President Steyn Laubscher of South Africa, in his opening address issued a challenge to all consulting engineers around the world. His challenge was,

"Adapt or die! If we consulting engineers are going to remain relevant, we need to reinvent the ways in which we do business."

One answer to Steyn Laubscher's challenge is the MENTORING AND TRAINING of our young upcoming consulting engineering professionals.

MENTORING OUR YOUNG CONSULTING ENGINEERS

Mentoring usually speaks to the process whereby a senior person provides advice and guidance to a younger person. AJCE has taken this mentoring concept several steps further when it took on the leadership of FIDIC's Young Professionals Forum or YPF. Instead of having an individual mentor, our younger consulting engineers in various countries now have an opportunity to network with each other on issues of common concern.

The YPF was born during FIDIC's Honolulu meeting, which was held in September 2000. This was the historic FIDIC meeting for which the U.S., China, and Japan were joint co-hosts. Members of AJCE took an active role in the planning and execution of this meeting and were instrumental in carrying out a roundtable for younger professionals. It was out of this roundtable that the YPF was born. The desire to network and to exchange ideas and experiences drove this decision for the YPF.

It is through the PROACTIVE LEADERSHIP of AJCE's younger members in sustaining the YPF that we now see FIDIC clearly demonstrating its concern for the future of our consulting engineering profession. Clearly, the active involvement of our younger professionals constitutes an investment in the future of our consulting engineering industry worldwide.

FORMALIZED TRAINING

Another answer to Steyn Laubscher is formalized training. The leadership of the China National Association of Engineering Consultants (CNAEC), which is the FIDIC member association in China, took up President Laubscher's challenge and put its effort towards the establishment of a formal training center in Beijing, China. In January 2001, CNAEC approached the FIDIC Executive Committee with a formal proposal for the establishment of an international engineering business training center at Tsinghua University in Beijing.

Not surprisingly, our Chinese colleagues had also begun to notice the changing pressures that the marketplace was placing on them. This thought was clear in their proposal which stated:

"The design professionals in China are primarily technically oriented because of their education, training and experience. Many of them have not had the opportunity to assume consulting duties prior to the design phase of a project. On the other hand, both their increasing market oriented clients and the growing size and complexity of capital projects have created a great demand for a much wider range of consulting services. In some cases, the design professionals have to take on the role of project manager and facilitators responsible for a broad scope of services. Unfortunately, many of them are not quite competent for the assignments and they have realized that they need to be trained in such internationally accepted consulting practice as FIDIC represents before they could help their clients. ---There is a growing need to expand the capacity of our engineers to provide this broader range of service."

The "Vision" section of the proposal also stated that the programs of the training center would be open to attendees from countries neighboring China.

The FIDIC Executive Committee agreed to participate in the establishment of the FTC under certain conditions, such as the full and active support of,

- The national FIDIC member association (CNAEC).
- A nationally respected university (Tsinghua University).
- The country's national government.

Part of the discussion also involved a realization that China represented nearly 25% of the world's population. The FIDIC Executive Committee also concurred with the intent to open the training center's programs to participants from other countries and also requested that there be no financial obligation on the part of FIDIC. All of these conditions were met and in early April 2001, the FTC Training Center was inaugurated on the campus of Tsinghua University.

THE FTC TODAY

Since its establishment, the FTC has conducted six senior one week training sessions. These training sessions have been directed towards the tools needed to develop and/or improve the attendees skills in engineering management to include project management and program management. The subjects covered have included subjects such as The Global Market, Leadership and Management, Project Management, Program Management, Sustainable Urban Development, FIDIC Conditions of Contracts, Organization of Consulting Firms, Ethics, Numerous Project Experience Examples, etc.

THE FUTURE

The future appears to present a number of exciting opportunities and challenges. One such opportunity and challenge relates to the FTC. The Chinese Government recently decided to actively promote training for engineering design, consulting, and project management.

China's market has become a very large world market in which Chinese companies increasingly need to demonstrate knowledge of and use of internationally accepted business practices, both in the local as well as international marketplace. In addition, foreign enterprises entering the Chinese market are also looking for knowledgeable local talent.

As part of this effort, the government has begun to move on the establishment of a graduate degree program related to engineering and construction project management. Since Tsinghua University has been designated to be included in the early establishment of such a program, the FTC is well situated as this program begins to move. This presents an excellent opportunity to infuse FIDIC's principles into the program.

Another challenge awaiting the FTC is the opening of its courses to participants from neighboring Asian countries to truly make it an international training center. It is on this matter that I see the possibility of the FTC and the YPF working together. The FTC's focus is on providing engineering management training for our younger practitioners, whereas the YPF focuses on bringing our young practitioners together on a worldwide basis. I firmly believe that somewhere in all of this lies a very good match.

CLOSING

The beginning of the Year 2004 will mark three years of operation for FIDIC's YPF and the FTC. The continued existence and activity of both the YPF as well as the FTC training center clearly demonstrates a proactive leadership on the part of our industry, and is certainly a very positive reflection on the leadership of both AJCE and CNAEC. The success of both is about the combined effort of many in providing leadership and being proactive to improve our industry - a new level of capacity building.

This new level of capacity building is not just about building basic capacity, but rather about elevating the private practice of engineering to a level where consulting engineers are increasingly recognized as leaders and creators of wealth in society.

Growing PFI/PPPs Market and Its Implications for Design Firms in Japan



Yuuichirou YASHIMA
PACIFIC CONSULTANTS CO., LTD.
Chief of PPP / PFI Department

1. PFI / PPPs: Global trend and the present condition in Japan

Since the legislative and administrative fiscal reforms were carried out by the Thatcher administration in the 1980s in the United Kingdom, the global trend has been toward smaller governments and privatizing public sector.

As part of that trend, Private Finance Initiative (PFI) was introduced in the U.K. in 1992. Since then, the PFI format of utilizing private capital and expertise in providing public services (PFI is often understood as a specific form of Public Private Partnerships or "PPPs", which comprise variety of contractual and collaborative partnerships) as same as other similar methods mobilizing private resources in many countries) has been recognized as a highly effective method by the governments of many nations seriously tackling fiscal reforms (Table-1).

In Japan, however, it took some time for PFI to be recognized and implemented in the real world. The Law enabling the tapping of private money into public facility development (PFI Law) was enacted in 1999 with the view to enhancing the legal and regulatory infrastructure for PFI financing, as well as facilitating land lease agreements on public lands in the context of PFI transactions. During the first few years since, however, there was some hesitation in implementing this new scheme, largely due to the insufficiency of political commitment to its effectiveness.

The wind changed when the Koizumi administration came to power in 2001. Since then, with the central government prioritizing PFI as one of the major devices for its reform agenda, PFI has spread fast over the nation. According to a recent government report, there are about 130 projects, of which about 30 are national and the rest are regional projects

The PFI Law allows wide varieties of projects to

Table-1 Major Sectors in the International Development of PFI /PPPs

Country	Major sectors developing in PFI /PPPs market
Japan	Healthcare, accommodation, IT and transport at the regional level
Finland	Road concession (shadow toll), School and higher education
France	Auto-route concessions (real toll) Water concessions
Greece	Road concessions (real toll), Thessaloniki light rail
Ireland	Transports, Education, Water, Waste management
Italy	Hospitals, transport, waste management
Netherlands	Water, high speed rail link
Portugal	Airports, road concessions (shadow toll)
Spain	Auto-route concessions (real toll) Regional road concessions (shadow toll)
Australia	Road (Melbourne), Hospitals (Victoria & NSW) Prisons (Victoria & West Australia)
South Africa	Prisons, water, healthcare & education

Source: International Financial Service London (IFSL)
Report : Public Private Partnerships:UK Expertise for International Market 2003

employ the PFI format, not restricting its application according to the facility type or the nature of the services provided. Major categories that are expected to adopt PFI include:

- Waste disposal and recycling, power generation facilities.
- Tourist facilities
- Logistics infrastructure
- Business infrastructure
- Mobile telecommunications facilities
- Toll roads
- Public housing

- Public parks (nature preserves, urban park facilities)
- Roads and highways (urban redevelopment)
- Museums and other cultural facilities
- Sports and recreation facilities
- Public cargo handling facilities
- Government offices

The basic framework of a PFI project in Japan involves the selection by a government agency (national or regional) of a private entity - often an ad-hoc consortium -- that would be commissioned, through a due process of tendering and contract negotiation, the responsibility for the project implementation usually including design, construction and operation of the property. Major

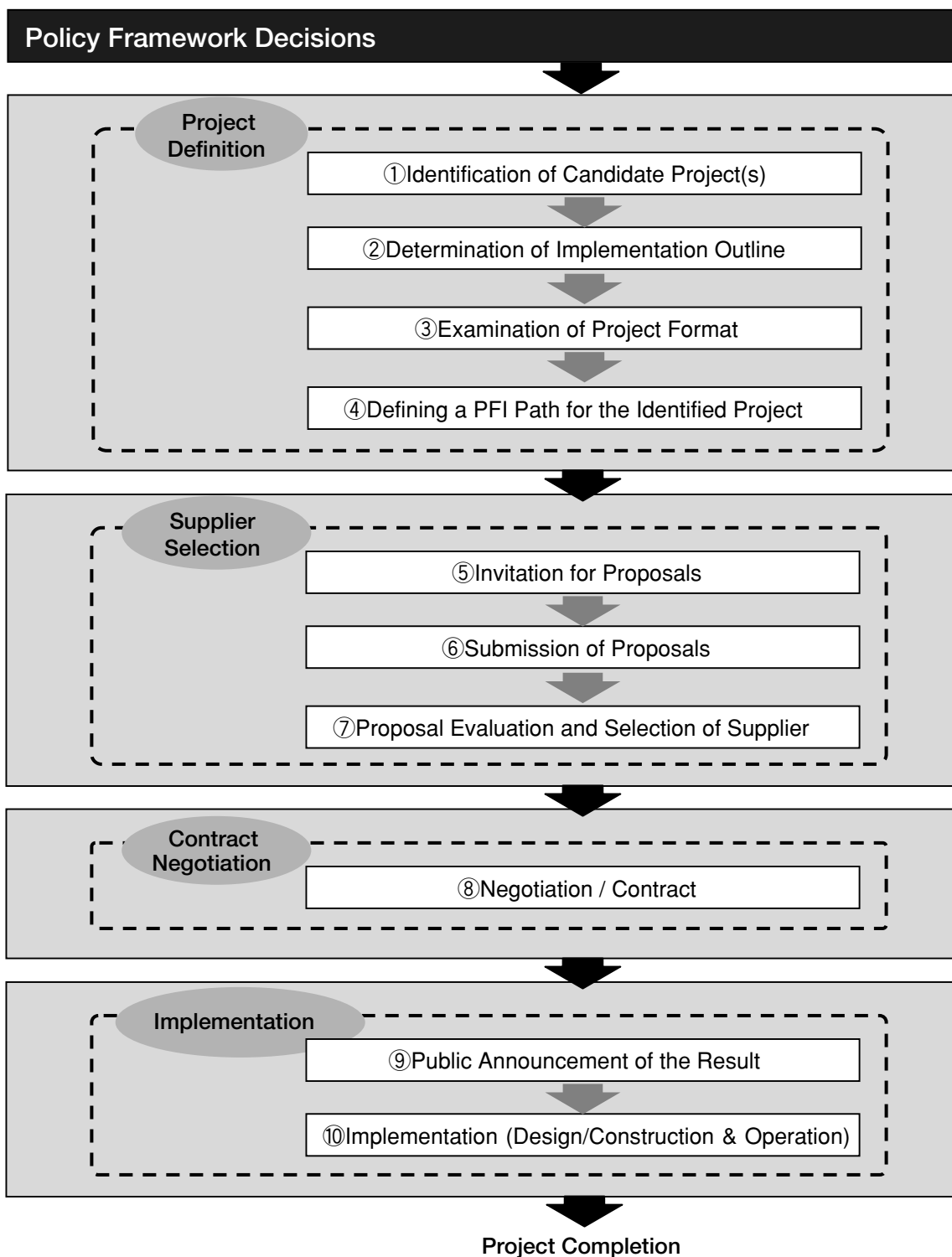


Figure-1 Project Flow of PFI Source: Based on "PFI"/Economic Planning Agency, March 1999

stakeholders and the relationship between them are as depicted in Figure-2 below.

To maintain the efficiency and effectiveness of this scheme, advisers for the public sector clients are demanded to have abundant knowledge and expertise to complete their duty. They are expected to optimize the implementation process by supplying right inputs to the client and the private candidates at the right time, while giving fair consideration to public goods and private benefit.

2. PFI / PPPs: Roles of design firms and increasing business chance

The traditional mission of design firms is to provide engineering service and technical advice to a construction and/or development project. Following this tradition, design firms in the U.K. have played key roles in each and every phase of major PPP/PFI projects (see Table-2 for example). Similarly, there are a number of Japanese design firms that have served for overseas BOT/BOO projects that precede today's PFI/PPPs.

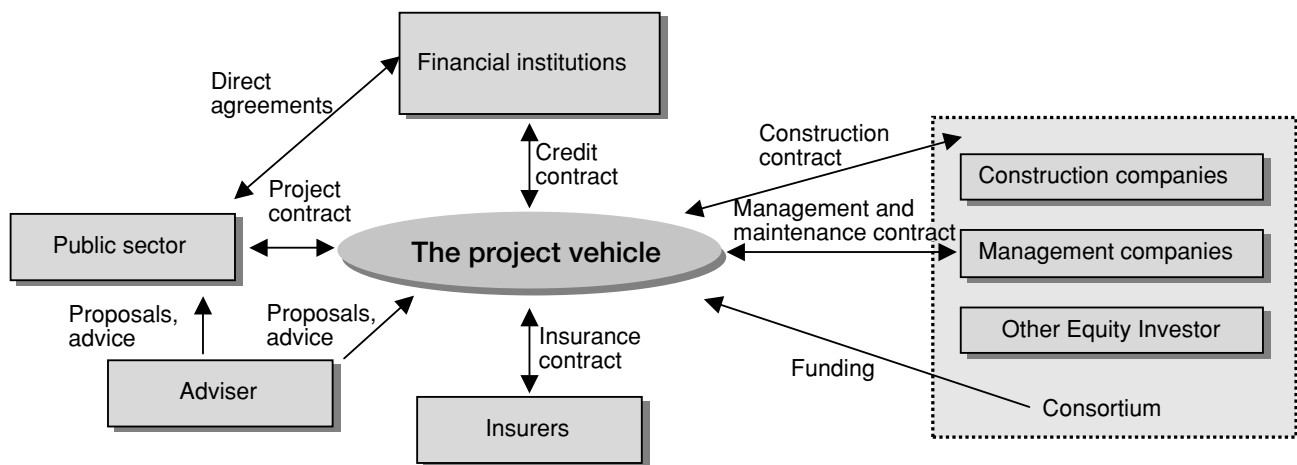


Figure-2 PFI scheme Source: same as Figure-1

Table-2. Roles of Design Firms by Project Phase in Second Severn Crossing Project

Stage	Orderer	Design Firm	Role
Project Identification and definition	Department of Transportation (DoT)	G. Maunsell & Partners, W.S. Atkins	Agent
Procurement	Special Purpose Company (Laing-GTM)	Sir William Halcrow & PartnersSEEE(France)	Design Consultant
	Special Purpose Company (Laing-GTM)	Percy Thomas & Partners	Consultant(Architect)
	Design Consultant (Halcrow-SEEE)	Gifford	Independent Checker
Implementation	Department of Transportation (DoT)	G. Maunsell & Partners, W.S. Atkins	Agent
	Special Purpose Company (Laing-GTM)	SGS Environ-ment	Independent Officer of Enviroment Liaison
	Special Purpose Company (Laing-GTM)	Sir William Halcrow & PartnersSEEE(France)	Design Consultant
	Design Consultant (Halcrow-SEEE)	Gifford	Independent Checker

Source: Based on Investigation of Japan Civil-engineering Consultants Association (2001)

In general, design firms can play a variety of roles for different entities in the different phases of the PFI/PPP process: i.e., they can play a key role for a public entity during the procurement process, as well as a similarly important role for the nominated private entity during the implementation phase.

At the project identification and definition stage, design firms, as independent engineering consultants, are expected to help public clients in identifying right projects from a viewpoint of public utility and urgency, executing feasibility studies, and in consolidating basic facility plans. Or they may choose to work for interested financial institutions and other private clients, giving market and project reports, assessing project risks and returns, and preparing business plans to anticipate their competitors in taking advantage of the growing market.

At the procurement stage, design firms can provide various engineering services from drafting of bidding formats to evaluation of submitted proposals, while at the later, contract negotiation stage, they provide technical services necessary for a solid PFI/PPP deal as well as its relevant financial deal, in order to secure the project's smooth implementation. In addition, Japanese design firms often take a mediating role between the public agent and the advisors of other professions (i.e. legal and financial/accounting). Finally, at the post-contract implementation stage, design firms are often

commissioned monitoring and evaluation of the project company's performance for assuring the quality of each project.

As mentioned before, design firms may work for the private entities entering PFI/PPP tenders: in such cases, they may play a corresponding role with their counterpart on the public side, or, even join a consortium - e.g., as the bidding group's designer and/or operator -- with some equity positions.

The brief overview above indicates that design firms are expected to fully demonstrate its expertise throughout the process from the preparation to the materialization of PFI/PPP projects. Their abundant experience as engineers in social infrastructure projects and their close, historically-developed relationship with public sector, as well as their neutrality as independent private entities amounts to qualify good design firms as a indispensable player in successful projects. It means that, with the growing PFI/PPP market, design firms are now facing remarkable opportunity to expand their business scope, not limited to its traditional role providing more or less purely technical services to public sector clients. In addition to the enhancement of their role on the public side, they now can see private entities and financial institutions as potential clients, waiting for high-quality services that only good design firms can provide.

Table-3. Project Phases and Assumed Roles of Design Firms in Japan

Project Phase	Role of Design Firms	Client		
		Public Sector	Private Sector	
			Consortium Project Vehicle	Financial Institutions
(i) Project Identification Phase Project Proposals Feasibility Study Defining a Specific PFI Project	Project Finding Study/Survey	○		○
	Feasibility Study of Candidate PFI Projects	○		
	Support for Outline Business Case/Facility Planning	○		
(ii) Procurement Phase Invitation for Proposals (IFPs) Evaluation of Submitted Proposals	Public Announcement of Outline Business Case	○		
	Project Proposal Development		○	
	Risk Assessment and Bankability Check			○
	Drafting Bid Material Formats	○		
	Supporting Evaluation of the Proposals			○
(iii) Negotiation/Contracting Phase Selection of the Best Proposal Negotiation / Contract	Proposal Evaluation, Support for Negotiation with Private Sector	○		
	Support for Negotiation with Public Sector		○	
(iv) Implementation Phase Detailed Business Planning Execution of the Project	Facility Planning and Design		○	
	Construction Management		○	
	Performance Monitoring	○		
	Support for Managing Project Schedule and Cost		○	

Source: same as Table-2

3. PFI / PPPs: Road to leading professional service firm

One of the unique aspects of PFI procurement is its extensive use of output specifications and performance monitoring as the chief device for maintaining the effectiveness and appropriateness - often referred to and quantitatively presented as VfM (Value for Money) -- of the private-led public projects. In such context, consulting engineers are required to have, more than anything, professional technical abilities to build an appropriate project frame that enables optimized Life-Cycle Cost (LCC) planning and risk transfer.

Furthermore, with the essential shifting of weight from construction of public facility to supply of public services, require corresponding changes in the role of design firms. The new requirement includes:

- a. Widening the perspective from that of a traditional, design-oriented servicer to a broader one, in order to cover the entire body of a project
- b. Gaining professional expertise and knowledge in field that has not been covered before, such as market forecast, procurement by output specification, project management, etc.
- c. Play commercial roles in building up consortiums and risk-taking businesses

In spite of the drastic reconfiguration of public service procurement and implementation under the PFI/PPP scheme, the priority remains unchanged: the significance of the projected service for the taxpayers. Considering this point, design firms stand in the most preferable position to bear the leading role in PFI/PPP projects - at least in Japanese context - against other technical advisors such as accounting and legal firms, who are not fully qualified to take the highly interdisciplinary responsibility. The current competitive advantage of leading design firms in Japan, over the prominent global accounting firms in the domestic PFI/PPP market may underwrite this notion.

From another point of view, it means that design firms in Japan are now required to play a synthetic role in the newly-opened market of PFI/PPPs, integrating responsibilities that have been separately borne by technical, legal and financial /accounting advisors, in order to maintain and to enhance its competitive advantage and to survive in the ever-shrinking market of traditional public works.

As legal advisers, design firms should be equipped with sufficient ability to control, with necessary supports from professional legal firms, the relevant legal procedures including:

- a. Putting down the project scheme to a legally manageable long-term contract
- b. Clarifying the risk-allocation in the contract
- c. Building in an appropriate, manageable reward/penalty system in the contract to ensure fulfillments of project aims

As financial advisers, design firms should be armed with tools and skills to draw up business plans as well as to evaluate them -- especially the expertise in cash-flow simulation and assessment. They are indispensable whoever the client might be, i.e. be it a public agent or a private entity.

In order to efficiently take such a synthetic role involving legal, financial and technical responsibilities, design firms in Japan increasingly need to directly employ variety of qualified professionals. It does not necessarily mean the decrease of the importance of networking with outside professionals (in fact, its importance is greater than ever before as well), but the ever-complicating nature of PFI/PPPs projects, as well as the increasing pressure on speed and accountability, require design firms to nourish proficient project management skills, on which ambitious design firms should put their focus on today. In this sense, PFI/PPPs opens up a precious frontier for such endeavor.

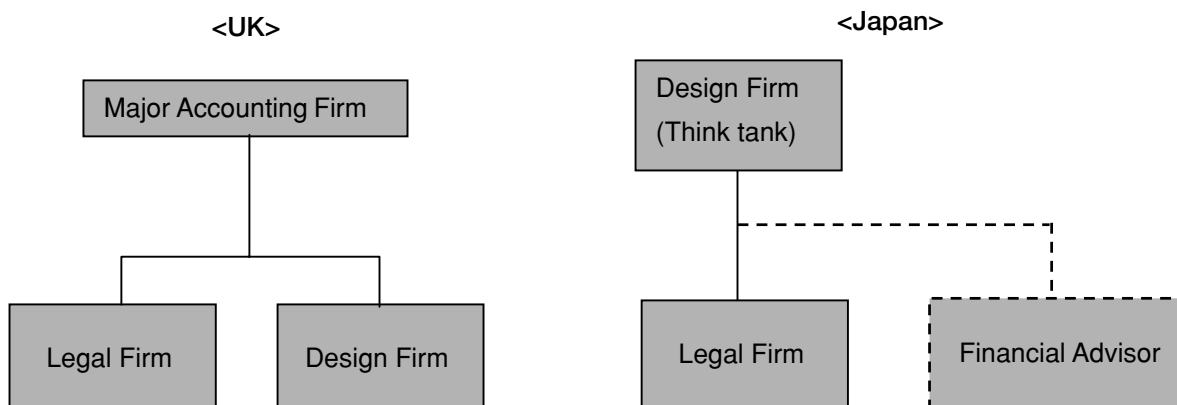


Figure-3 Examples of Relationship between Professional Advisers in PFI/PPPs

A LETTER FROM AJCE OFFICE

AJCE 30 years anniversary commemoration

Association of Japanese Consulting Engineers (AJCE) were established in April 1974, and we joined in FIDIC as a representative of Japanese CE in 1977. During last 30 years, AJCE have increased number of membership and organized several committees following to FIDIC Organization. AJCE have developed through interchange with FIDIC and CE of foreign countries in order to develop their activity of Japanese CE. Last few years AJCE have been participating in the committees of FIDIC as well and we support the worldwide activities of FIDIC.

Now, AJCE have the 30th anniversary in April 2004 this year. Taking this opportunity we expect to receive more support and powerful cooperation from our membership for further development of AJCE and FIDIC including foreign countries MA. At this moment, we are special thankful to everyone related to AJCE and FIDIC and we want to explain about outline of the 30 memorial event. It is three of the following to become the pillar of this event.

1. Commemoration symposium

The theme of this symposium will be entitled with "The Challenge to Changing Value, the CE as Responsible Partner "We will invite FIDIC Presidents and Professor of university as keynote Speakers. Together with Panel Discussion will be held to deepen this theme. It is expected to become the energetic and fruitful symposium, which involved the participants of the meeting place.

2. Commemoration Party

We are pleased to hold a memorial ceremony to invite FIDIC Executive Committee Members and all membership of AJCE, in addition to representative from Government Offices, Friendly Associations, and International Organizations.

3. Commemoration Book of 30-years History

It is described the details of the AJCE establishment, joining to FIDIC, and the interchange with the foreign countries MA and the expansion of the activities range summarize history included to the memorial event of this year.

We intend to report in the next issue of our News Letter on the details of these events to ask you the good memory of AJCE.