Introduction to ASPAC Young Professional Forum



ARASH EMAMBAKHSHChair of ASPAC YPFSC

The Formation of the FIDIC ASPAC Young Professionals Forum

In March 2013 during the ASPAC FIDIC conference held in Bangkok Thailand, Arash Emambakhsh from Iran was the only individual representing the Young Professionals (YPs). With the backing of both FIDIC Young Professionals Forum Steering Committee (YPFSC) and Mr Enrico Vink (Managing Director of FIDIC), the vision of restarting the ASPAC Young Professionals Forum (YPF) was given the nod of approval by the FIDIC ASPAC Executive Committee with Arash taking up the position of Chair of the ASPAC Young Professionals Forum Steering Committee (YPFSC).

By June 2013, 8 countries were represented in the ASPAC YPFSC:

- Arash Emambakhsh Iran
- Garrett Bray Australia
- Zhou Sheng China
- Atasi Das India
- Takashi Matsuo Japan
- Shah Izzni Talif Malaysia
- Patrick John Ramos Philippines
- Sung Joon Park South Korea.

The advisor to the group is Jomanah Al Btoush from Jordan.



With the founding of the Steering Committee, the objectives for the ASPAC YPF were laid out:

- Provide a voice for the YPs within the Asia Pacific region
- Provide channels for networking, awareness and interaction
- Publicise best practices and standards
- Share success stories about YPs
- Provide a supportive space for YPs to discuss and communicate
- Pursue capacity building initiatives
- Enhance the culture of dialogue
- Provide connection with FIDIC
- Enhance the profession and industry.

Membership eligibility for the Young Professional Forum is open to any **engineer**, **planner**, **or allied professional** who's member firm is part of FIDIC and wishes to join a global network of similar professionals within the FIDIC Asia Pacific community. The recommended age range for YPF membership is up to the age of 40.

Successes and Milestones

In the relatively short time that the ASPAC YPF was formed, the group had achieved a number of success which includes:

- Online meetings and brainstorming sessions.
- Production of a flyer to introduce the ASPAC YPF and successful distribution of the information during the 2013 FIDIC Centenary Conference in Barcelona
- Prepared a database of regional trainees of the Young Professionals Management Training Program (YPMTP)
- Having 6 of the 8 ASPAC YPFSC members attending the ASPAC Bali Conference 2014.

The biggest achievement for the ASPAC YPF came in the form of dedicated time allocations for the Young Professional presentations during the FIDIC ASPAC Conference 2014 in Bali, Indonesia with 7 Young Professional Speakers.





The success of the YP presentation came about with the support of the Iranian Young Professionals Society. The topics presented are:

ASPAC Young Professional Forum (An introduction to the "New Sun Burning from the East");

Pro Bono Engineering And The Role of Young Professional (Contributing engineering services and skills as a form of aid);

Fundamental Information for Establishment of YPEP (Young Professionals Exchange Program between Australia and Japan);

Consulting Engineering Industry In the 3rd Millennium (Highlights potential challenges for the engineering industry in the future)

Women In Engineering (A comprehensive look into the perception, challenges, position, and contribution of women in Iranian engineering consultancy).

FIDIC Appreciation

Appreciating the level of contribution of ASPAC YPF to FIDIC ASPAC 2014 Bali Conference, FIDIC President, Pablo Bueno, issued the appreciation letters to the CEOs of the following companies which supported their YPs to contribute in YPF programs:

Arabtech Jardaneh (Jordan), BG&E (Australia), China Mobile (China), CHODAI (Japan), Cont & Associates (Iran), Intercontinental Consultants and Technocrats (India), Kahanroba (Iran), Philkoei International (Philippines), RPM (Malaysia), SAT Consulting Engineers (Iran).



ASPAC Young Professionals Forum in Bali, Indonesia
From left: Patrick J Ramos (Philippines), Shah Izzni Talif (Malaysia), Arash Emambakhsh (Iran), Takashi Matsuo (Japan), Garrett Bray (Australia), Zhou Sheng (China), Mandana
Cont (Iran), Sasan Karbasizadeh (Iran)



ASPAC YPF Panel, FIDIC ASPAC Bali Conference 2014



Young Professionals Presenters - Bali, Indonesia

New Members

On 11-July-2014, the president of ASPAC mandated the new members of ASPAC YPFSC as follows:

- Richard Moh Taiwan
- Niwat Thanpitinan Thailand

Now, the Steering Committee consists of 10 MAs out of the 22 MAs within the region.







Moving Forward

The ASPAC YPFSC will continue to promote the Young Professionals Forum with plans to gain more ASPAC member countries to have a representative in the steering committee, promote the forum to each countries' respective Member Association, produce a business plan for the group, contribute to ASPAC FIDIC online newsletter, and conduct online webinars for the YPs.

The steering committee hopes that there will be more Young Professionals attending conference to represent the generation, and that the New Sun from the East will not set for a very long time.

ASPAC YPF Webpage

Supported by FIDIC, ASPAC YPFSC owns its webpage on FIDIC's website.

You can visit us on in FIDIC website under the topic "About FIDIC/FIDIC YPs/ASPAC YP Group" or using the http://fidic.org/node/5482.



Next Step: Tehran Conference, 10-13 May 2015







YPF panel is now organized as one of the main panels of next FIDIC-ASPAC conference in Tehran, Iran.

YPs are now fully engaged by organizing the conference by running the conference organizing committee, it will be the first FIDIC-ASPAC conference fully organized by the YPs.







Topics of YPF Panel in recent ASPAC Conference:

Pro Bono Engineering: Developments within the Australian Consulting Engineering Industry and a Case Study in Rural Tanzania



Garrett Bray
CPEng MIEAust NPER
Senior Structural Engineer, BG&E Pty Ltd
2013 Australian Young Professional Engineer of the Year

Pro bono publico means 'for the public good' and for the professional services it means performing work at reduced rates or zero cost. Top CEOs are finding that being successful in the long term means asking what can be given to society to make it better 1. Pro bono engineering is increasingly a feature of Australian firm's Corporate Social Responsibility Programs and is providing significant benefits to the community, organization and to the profession at large 2.

Asignificant development in Western Australia is the development of an industry level Clearing House concept organization that is currently being piloted with the aim to facilitate, record and promote pro bono activity in the engineering industry. This presentation will discuss the development of this trend as well as present a case study of a recent successful pro bono engineering project by an Australian firm.

The case study features the design and construction of four bridges and culverts in rural Tanzania by a group of engineers and technicians from Perth based consultancy BG&E. The original timber ridges had been significantly damaged by floods in 2011 and were rendered unusable for transport and trade. The design required solutions that would resist future flood events and feature improved durability and wearing surfaces while being feasible to construct with hand tools and manual labor. The presentation will give an overview of the project, its challenges and outcomes.

Fundamental Information For Establishment Of Young Professionals Exchange Program (YPEP)



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ABSTRACT

It has passed around 20 years since the establishment of the Young Professionals Exchange Program (YPEP) between Consult Australia (CA) and Association of Japanese Consulting Engineers (AJCE) in 1996. The exchange program has been improved year by year, especially after the reviewing in 2006. Based on the accumulated experiences and confidential relationship of both member associations, it is getting more accustomed to operate YPEP nowadays. This paper is to introduce the fundamental information for planning and operation of YPEP.

Young Professionals Exchange Program (YPEP) is an annual exchange program of young engineers established in 1996 between the Association of Japanese Consulting Engineers (AJCE) and the Consult Australia (CA). The general principle behind YPEP is that "cooperation between organizations, and business between companies could grow from friendships between individuals", with the exchange program a way to promote long term friendships. Now that YPEP of which program includes technical, social and cultural activities has gotten on the right line and in the cycle of PDCA for the further development.

Think about the current economic growth of countries in Asia Pacific region and a momentum generated by young professionals (YPs) of ASPAC, it is foreseeable that the YPs demand opportunities for participating in an exchange program which is similar to one held between CA and AJCE near future. Consequently, this paper aims to introduce about YPEP not only its aims and training programs but also general approaches to operate YPEP.







Consulting Engineering Industry in the 3rd Millennium



Sasan Karbasizadeh

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ABSTRACT

The history of the consulting engineering industry as we are experiencing it today is getting back to almost 120 years ago. During all these years, this industry has been faced with many changes, evolution and challenges such as increasing in the number of consulting firms, diversification of fields of services and getting deep in specialty. With the change of the technology the consulting industry is faced with many developments like getting structured through national and international associations, empowered by the market mechanism and business environments and is facilitated by the management tools and ITC techniques.

Nowadays, undoubtedly the role of the consulting engineers in the project life cycle is no longer limited to design of the projects. In this era, it is not expected from the managers of consulting firms to run their companies based on traditional management methods, not considering the influence of ITC on different aspects of Consulting Engineering business environment.

Therefore, it seems that, the third millennium would figure out a different future for the consulting engineering industry. Indeed the evolution in the past and present have brought a competitive business environment along with knowledge, facilities and advanced technologies for consulting engineering firms.

The aim of this paper is to demonstrate the position of consulting engineers in third millennium; in this regard, three major forces that will affect the consulting engineering firms in 3rd millennium are distinguishes as followings:

- 1-Business environment
- 2- Management issues
- 3-Information technology

The main question is "How a typical consulting engineering firm, will face with three above-mentioned forces in the third millennium?" answering to this question needs to address the three following points:

- 1- Since the market needs are changing and the consulting engineering firms are market driven, do they need to change their scope of services to be compatible to the new raised market needs?
- 2- Since the management issues (human resource related issues and needs, knowledge management, agility,..) in the 3rd millennium is far from what we have experienced in the past, do the consulting engineering firms have

to apply different management approaches in their firms, where the main recourses are acquainted with the human capital and accumulated knowledge?

 3- Since the information technology is growing fast will it help the Consulting Engineering firms to improve their capabilities and projects delivery as well? How will it be realized?

Role of Mobile Internet in Enhancing Business Sustainability of Consulting Engineers



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CO. LTD. (CMDI) - China

ABSTRACT

As society has developed, technology has developed to meet its needs. From the agricultural ages, to the industrial age, and now the information age, technology has shaped our past and continues to shape our future. A significant development in the world is the deployment of 4G mobile communication systems and the new release of iPhone supporting 4G. Everyone and every company can easily access Internet.

Mobile Internet, the sustainable emerging business way by intelligent mobile terminal and mobile communication access to Internet, has revolutionized the way in which the world operates. People are more connected than ever before, to help with their businesses, entertainment and daily issues. Mobile Internet technology has also revolutionized the business of consulting engineers, in terms of knowledge transfer, engineering design and business systems on such networks. Moreover, Mobile Internet plays the important role in enhancing business sustainability, whether in economic and social development or in environmental protection.

This presentation will discuss the development of this trend as well as present a case of a recent successful 4G engineering project in China. The application trend of Mobile Internet is obvious to produce sustainability by increasing efficiency, encouraging participation, and improving the quality of planning, implementation and evaluation of business strategies. The case study features the design and construction of 4G systems in 15 cities, working coordination with the present 2G/3G systems and facing the demand for Mobile Internet. The presentation will give an overview of the project, its challenges and outcomes, esp. how Mobile Internet based 4G systems comes to shaping sustainable solutions for the future business of Consulting Engineers.







Women in Engineering



ATASI DAS
Civil Engineer
Intercontinental Consultants &
Technocrats Pvt Ltd - India

The need for engineers is growing rapidly. Highly complex, global problems require a diverse pool of engineers with a variety of

skills, views, and leadership styles. Although the job market for engineers is predicted to grow substantially over the next decade, women currently comprise a comparatively smaller percentage of the engineering workforce and gender diversity is prominent across the globe to various degrees. To this effect, a presentation on "Women in Engineering" was made by Ms Mandana Cont (MA-ISCE, Iran) at the TCDPAP - FIDIC ASPAC Conference 2014 in Bali, Indonesia as part of the YPF program. The study dealt with the perception, challenges, position, and contribution of women in the Iranian engineering consultancy business based on feedback from a comprehensive survey. The study encompassed three levels of engineers: Executive Committee members, Women Engineers (In Management Levels & Employee Levels), and Men Engineers (In Management Levels & Employee Levels). The statistics included the numbers and facts, the choices, the opinions, discriminations, the qualities & deficiencies and the facilities, bonuses, etc. The conclusion drawn from the regional survey conducted in Iran exhibited that the participation of women has increased in engineering but the recognition from both women and men colleagues is yet to be fully accomplished.



The presentation was a success as the issues projected caught immediate attention of the participants including the FIDIC Executive Committee members who were present. With the aim to study the global perspective, FIDIC YPF

has selected the same topic "Women in Engineering" to be presented at the broader platform of the FIDIC 2014 conference at Rio. With the encouragement of promoting the study to go global and have a worldwide survey, analyze the situation and propose the ways to improve the gender balance and compare it in different countries, a committee has been formed to represent various regions worldwide. The committee is well represented by both men and women engineers in order to get an unbiased picture. The study is phased into six steps including worldwide literature review, sampling and constructing instruments for a comprehensive survey, data collection, data entry, data analysis, and final report. The culmination of the study will be presented at the FIDIC 2014 conference to an international audience.

MA-ISCE extended helping hand by sponsoring the research work including contracting a group of eminent academicians to advise in all phases of the global study. The role of ASPAC YPFSC includes:

- 1. Nominate persons from FIDIC MAs to coordinate data gathering from different countries (by disseminating the questionnaire);
- 2. Spread the questionnaire through its network of YPs.
- 3. Help coordinate with MAs who have done relative studies before.

It is worth mentioning that ASPAC YPFSC received an overwhelming response in fulfilling the commitments of the research-study.

Back in 2010, at the closing ceremony, a woman engineer asked FIDIC to consider how it can help promote the role of women in engineering industry. With this presentation on "Women in Engineering" in 2014, both FIDIC and ASPAC YPFs hope that, through this research-study, a truthful answer can be achieved.

RIO Conference



MANDANA CONT

Women in engineering was one of the topics, presented in YPF panel in FIDIC-ASPAC Conference in Bali-Indonesia (March 2014) by Ms. Mandana Cont form Iran. The article

was such an interesting one that attracted attendees including the representatives of FIDIC and ASPAC EC. ASPAC YPF proposed FIDIC YPF to expand the survey internationally to present in Rio Conference.

Accordingly, Mandana formed a professional committee to support her, in order to conduct the research procedures including: Literature review, Questioner Design, Sampling, Analysis, etc.

The Members of the Survey Committee

1	Mandana Cont	Iran
2	Selena Wilson	Canada
3	Jomanah Albtoush	Jordan
4	Xiao Ziyu	China
5	ATASI DAS	India
6	Shah Izzni	Malaysia
7	Nicolás Rodriguez-Arias	Spain
8	Takashi Matsuo	Japan
9	Doyin Obikayne	Nigeria
10	Manoochehr Azizi	Iran
11	Arash Emambakhsh	Iran
12	Nader Shokoufi	Iran
13	Sasan Karbasizadeh	Iran
14	Fatemeh Hassani	Iran
15	Shahram Sandiani	Iran
16	Javid Saraie	Iran





Tehran 2015 Conference

Nader Shokoufi

ISCE (Iran Society of Consulting Engineers) will host the next FIDIC-ASPAC conference in Tehran in May 2015.

Celebrated its 40th anniversary last year, ISCE consists of hundreds of private engineering consultant companies covering different aspects of the industry. This makes ISCE the main representative of engineering society in Iran, while it is known as the promoter for business integrity and sustainable developer in Iran.

Iran

With more than 1.6 million square kilometers of land and more than 75 million populations, Iran is the second biggest country of the Middle East and the second most populated country of this region. Combine this with the fact that Iran has the 4th biggest oil reserve and 2nd biggest gas reserve of the world and you'll get a picture of a country your business can not afford to miss.

Iran is aiming for 8 percent annual economic growth, and the government spending on infrastructure development has risen to tens of billions of dollars. This makes Iran a very interesting emerging market, not only in the fields of Oil and petrochemical industries, but also in water resource development, roads and housing. Add to it millions of well-trained university graduates and advanced engineering associations and you'll have a good place to look for your possible joint ventures.

A perfect networking event

The conference will be a perfect networking opportunity to meet all the major players in the ambitious development program of Iran and the emerging market of the Middle East and Asia from government agencies, financing bodies and main clients to contractors and consulting engineers who'll be your possible partners in projects, the FIDIC-ASPAC/TCDPAP 2015 conference will be a place to be.

The Islamic Development Bank and the Federation of Consultants in the Islamic Countries (FCIC) will be a part of this conference. As the second shareholder of IDB, Iran plans to use 3 Billion USD of bank resources in its development projects and there's a very good opportunity to form joint ventures with Iranian Consultants and contractors who plan to increase their international projects to 20 Billion USD in the next 5 years.

The Venue

The conference venue will be Iran Conference Center in northern Tehran. The Building was constructed in 1997 to host the meeting of heads of states of the Islamic Conference Organization and has hosted several high ranking meetings since then.

Hotels

Two five star hotels (Azadi Grand Hotel and Esteghlal Hotel) that are a few minutes ride from the venue are planned to host the

participants. There are a wide range of rooms from single rooms to luxury presidential suites with very affordable prices.

Side-conference tours

There are a wide range of interesting programs to entertain the accompanying persons: The museum of ancient Iran for the history lovers who would like to peek into thousands of years of history or The Museum of modern arts that hosts some of the major works of art from around the world whose treasury is unmatched by any museum outside Europe or north America, or the Carpet museum where you will see the finest carpets imaginable. You can walk into the Golestan Palace and enjoy the glamour of Qajar era, or you can watch one of the biggest treasury of jewels of the world in the National Jewels treasury museum including the biggest pink diamond of the world: Darya-ye Noor. There are several parks and mountain hiking routes and amazingly enough you can hop into a cable car, a few hundreds of meters from the conference venue and ski in one of the highest ski resorts of the world by the Tochal peak.

Post Conference Tours

Isfahan, the pearl of the Islamic architecture is just a short flight away and a two-day tour is just enough to give you a glimpse into the highest level of beauty that architecture can provide.

Shiraz and its neighboring Persepolis will be a two-day tour into a history that is more than 2500 years old.

A one-day Sahara tour will show you the beauties of an environment unlike anything you have ever experienced.

Travel

Tehran IKIA airport is connected to most major airports of the world and it is just about an hour away from the conference hotels and venue.

Most travelers will require a visa but a short stay visa for one week can be issued in the airport upon your arrival. The participants who would like to enjoy the post-conference tours will need to apply for a visa in advance. ISCE will apply for visas for all participants.

Connectivity

The cellphone operators in Iran have roaming contracts with most major operators of the world, but you can also buy a prepaid SIM in the airport or at your hotel. The Hotel and the venue are equipped with free WiFi internet connection.

