



International Federation of
Consulting Engineers (FIDIC)

THE YOUNG PROFESSIONAL FORUM (YPF) IN FIDIC INTERNATIONAL INFRASTRUCTURE CONFERENCE - JAKARTA 2017

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FIDIC International Infrastructure Conference was held in Jakarta from 1st to 3rd of October 2017. This report represents the main activities during the conference with the great focus on Young Professionals' activities and achievements.

The Young Professionals Forum (YPF) is the group of Young Professionals (YPs) of the International Federation of Consulting Engineers (FIDIC). It was formed in 2004 with the intention of providing YPs with the opportunity to participate actively in FIDIC with their peers and to develop the next generation of consulting engineering industry leaders.

As a leadership committee, the YPF Steering Committee (YPFSC) was formed to develop communication and networking opportunities for all YPs involved in the FIDIC community. It is run by a dedicated committee of YPs volunteers.

FIDIC Young Professional Forum Steering Committee (YPFSC) chaired by Ms. Jomanah Albtoush from Jordan, includes 31 members from different countries around the world. This group started the preparation for Jakarta conference's tasks immediately after Marrakesh conference since October 2016 and made great efforts with the help of its 22 sub committees. It is noteworthy to mention that steering committee's representatives play an active role in all FIDIC committees.



They accomplished remarkable achievements in Jakarta conference that highlight the spirit and diversity of YPs, all details will be discussed in the following.

FIDIC Best Business Practice Forum: Sunday, 1st of October

The conference started with the best business practice forum at 8:30 A.M in the morning. This day mainly allocated to young professionals of FIDIC.

- Plenary 1- Young Professionals Open Forum

The YPF started the conference by holding their morning panel. The first presentation was given by Ms. Jomanah Albtoush from Jordan with the subject of "YPFSC progress in 2017". She provided a summary for YPFSC goal, vision, mission, organization, distribution, partnership, activities, achievements and challenges in 2017. Then, Mr. Takashi Matsuo from Japan, Chair of Young Professional Forum Steering Committee of Asian and Pacific region (ASPAC), had a presentation titled "Voice of YPs in ASPAC Region for Resilient Future". He pointed out the ASPAC YPF details and the

recognition of current situation of YPs in the region. He highlighted the experience of building up mutual understanding on challenges of each YPF and in preparation for sharing good practices thrived in one country within the region with others.

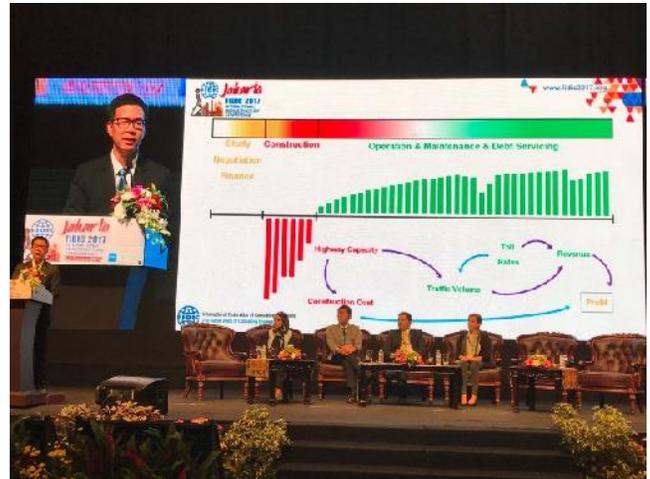


The 3rd presentation was given by Mr. Ahmed Stifi from Germany with the subject of "The Journey to Green Field, the Role of Consulting Engineers in the Decommissioning of Nuclear Facilities". Ahmed introduced the new generation of projects, mainly nuclear power plants, which needs accurate attention and preparation from consulting engineering to be implemented in a sustainable way. He introduced the term "Decommissioning of Nuclear Facility" and demonstrated the challenging tasks for consulting engineers in this field to plan decontamination and decommissioning process without producing additional secondary wastes and overcoming time and cost overruns. Also he invited YPs to attend FIDC 2018 conference in Berlin.

The 4th presentation was delivered by Ms. Silvia Folgori from Italy titled "Resilient Infrastructures in Italy, The Challenge in Retrofitting in Historical Contexts". Silvia mentioned the importance of preservation and maintenance of Italian cities and the need to make the cities as a whole (infrastructure, monuments, historical centers, buildings) resilient, with the double meaning of hold out to external events both for the citizens and the history present in the cities.



The 5th presentation was given by Mr. Tanaphat Jeerangsuwan from Thailand. The title of the presentation was "A System Dynamics Map for PPP, Concession Evaluation for Highway Facilities". Tanaphat pointed out that the available qualitative and quantitative frameworks for evaluating the feasibility and viability of the utilization of a PPP concession for large-scale highway development and improvement projects are not capable of evaluating the viability of a concession from a lifecycle perspective. He said that his research utilizes the concepts of system dynamics and presents a concession map which helps the evaluation of financial and economical viability of a PPP concession for financing a highway infrastructure project.



- Plenary 2- Sustainability, Capacity Building, Integrity Management
- Plenary 3- Risk & Quality, Contracts, Business Practice. As part of this session Ms. Jomanah AIBtoush provided a short summary about "BIM Use Survey" that was one of the YPFSC initiatives in 2017 in cooperation with FIDIC Risk, Quality and Liability Committee.

➤ YP Technical Presentation- MRT Jakarta

MRT Jakarta Technical Presentation was one of the activities coordinated by YPFSC during 2017 Conference. The Technical Presentation was held in the FIDIC Best Business Practice Forum day at 10:30 AM to 12:00 PM and it was attended by YFPSC members, other YPs and other interested participants.

MRT project, the Jakarta Mass Rapid Transit system, is currently under construction in two north-south and east-west lines. About 15 local and foreign contractors have worked on this project. Jakarta, the capital city of Indonesia, includes over 9 million inhabitants and heavy traffic is one the most problems in this city as the average velocity of vehicles is 6 (km/h). Consequently, transport issues have increasingly began to attract political attention and construction of the MRT project will have a remarkable impact on the city traffic. It is discussed that the most problem which they had in the construction was surface waters due to large amount of precipitation during a year. Funding resources, construction details of under-ground and elevated stations and construction policies in MRT project were the other discussed issues during this meeting.



➤ FIDIC YP Booth

YPs' presence was strong in FIDIC booth during 3 days in Jakarta Conference. They advertised YPFSC plans for 2018 including Young Professional Management Training Program 2018 (YPMTP) and the activities & policies related to FIDIC Conference 2018 in Berlin. It is noteworthy to mention that for the first time, YPs presented the YPFSC booklet including the presentation abstracts of young professionals in Jakarta Conference.



➤ First International FIDIC Young Professional Symposium

The first young professional symposium was held on 1st of October in 2 separate sessions. This was one of the achievements of YPFSC during 2017 and it had great outcomes due to the high quality of presentations and the variety of perspectives presented in Jakarta Conference. The main topics of presentations were in line with the conference theme "Resilience Infrastructure".

• Symposium Session 1

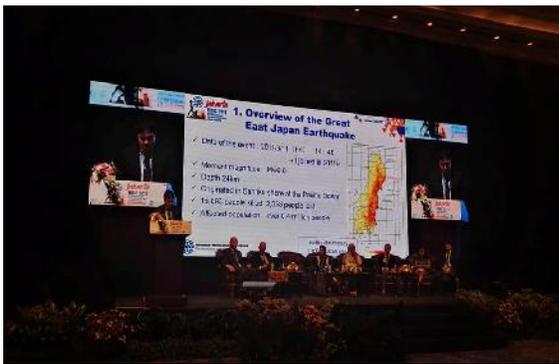
This session was started by the presentation which was given by Mr. Cosmin Tobolcea of Romania and Mr. Adam Bialachowski of Poland. The title of their presentation was "Future of How Engineers Work, Key to Resilient Infrastructure & Improving Life". Cosmin and Adam pointed out that their research focuses on the importance of

changes in how engineers work (especially YPs), how information technology is changing the engineering consulting services market and how this will have an impact on resilient infrastructure and improving life. They mentioned that planning more resilient infrastructure systems is significantly advanced by communities when they engage in continuous resilience planning by:



Create a continuing planning and development process that will shift the way in which infrastructure services are designed and implemented, to consider more resilient protection for existing and future infrastructure systems.

Create a resilience program and recovery plan for post disaster implementation that considers the types of risks that threaten critical systems, assesses vulnerable infrastructure and identifies priorities for improving resilience, based on an assessment of multi-compartment and life-cycle costs and project benefit.



The 2nd presentation was given by Mr. Eiji Sawamoto of Japan. The title of which was "Proposal for Resilient Infrastructure Maintenance from Japanese YPs through the Experience of "The Great East Japan Earthquake". Eiji mentioned that establishing resilient infrastructure is extremely important in Japan because this country is particularly prone to natural disasters such as earthquakes and floods. He added that his presentation was done

by YPs including recovery and reconstruction process of sewerage treatment facilities at Kesennuma City of Miyagi prefecture, and what the YPs felt and learnt through this project.



The 3rd presentation was delivered by Ms. Jomanah Albtoush from Jordan & Ms. Wafaa Balla Beshir Ahmed from Sudan. The title of their presentation was "Humanitarian Engineering to Rescue". Jomanah and Wafa pointed out the definition of humanitarian crisis/disaster and the importance of this criteria. It was mentioned that humanitarian engineering aims to research, design and implement to directly improve the well-being of

poor, marginalized or under-served communities, which often lack the means to address pressing problems. So, their research goal was to study the role of engineering industry in the humanitarian responses worldwide. To do that, they prepared a questionnaire and issued an online and focused survey worldwide to study the respondent's feedback. They discussed how to integrate the efforts to achieve the global partnership between

engineering sectors and humanitarian works, how young professionals can help in humanitarian engineering and how do consulting engineering can be more involved and effective.



The 4th presentation was given by Mr. Pham Ngoc Hung from Vietnam with the title of "Evaluation the Effect of Changes in Natural River Flow for Downstream Areas after Construction of Hydropower Plants in the Central Highland-Vietnam". Pham mentioned that although constructing hydropower plants in Vietnam had positive contribution of energy resources and the economic growth of the area, some hydropower projects in the Central Highland in

this country have also had negative impacts on the environment because these plants altered the natural flow and discharged the flood annually causing damages to the downstream. He provided some experiences of Power Engineering & Consulting JS Company No.3 known as PECC3 in approaching and developing effective flood control plans for downstream dams.



The last presentation was delivered by Ms. Keamogetswe Mmekwa from South Africa the title of which was "How Design Led Thinking by YPs can Contribute to Resilient Infrastructure in Africa". Keamogetswe mentioned that civil infrastructure around the world is deteriorating at a rapid pace and the budget which is required to be able to fund the Africa's infrastructure for the next 10 years will not be met due to the decline in growth in the sub-Saharan Africa region from 3% in 2000

to 1.5% in 2016. She continued her presentation by discussing the design thinking as an approach to problem solving, the importance of maintaining the resilience in Africa's infrastructure and Young Professional contribution in the design to innovative process.

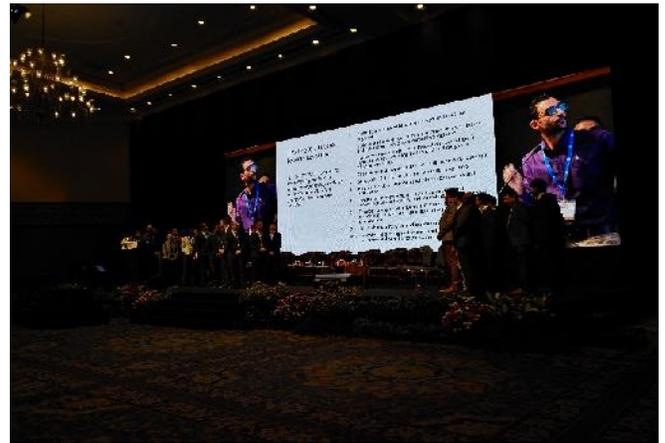
- Symposium Session 2

The session 2 started after 30 minutes with the presentation entitled "FIDIC and YPs" by Mr. Arash Emambakhsh from Iran. Arash Pointed out the definition of "Young" and "Professional" in different organizations and introduced the meaning of Young Professional (YP) in consulting engineering and especially in FIDIC. He continued his presentation by providing



some successful examples of young people as an entrepreneur, CEO or a leader all around the world. He discussed how does FIDIC deal with aYP, why YPs did not reach the main leadership levels in FIDIC and associations related to it up to now. He clarified the differences between leadership and management and recommended some practical solutions for leaders to be more successful in running their businesses.

This session was followed by the Future Leaders Forum where the number of selected participants in Young Professional Management Training Program 2017 (YPMTP) gave their presentations about this program and their point of view, findings and experiences corresponding to consulting engineering profession and FIDIC organization. At the end of the session, the FIDIC president Mr. Jae-Wan Lee dedicated the certificates to YPMTP participants. YPMTP is a program targeted the YPs worldwide in the engineering industry started in February till August as online sessions and ended with 5 face to face days directly before the conference. During these five days, participants and moderators discussed in details about important related topics such as business integrity management, human resources management, risk management, business development, financial management and control, quality management and sustainable management.



Also at the end of YPMTP graduation ceremony, Mr. Jae-Wan Lee FIDIC President provided Ms. Jomanah Albtoush generous financial support to support YPFSC activities.

➤ FIDIC YP Meet & Greet and Welcome Reception Dinner

The last programs of the 1st day of October were allocated to YP meet & greet and Welcome Reception dinner which were held in Jakarta Convention Center. In meet & greet, Young Professionals talked to each other and shared their ideas in one hour.

In Welcome Reception dinner, all Jakarta Conference's participants gathered and tried to communicate and network.

The Welcome Reception finished at 9:30 P.M.



Day 1: Monday, 2nd of October

The first day started with the Conference opening ceremony by Mr. Jae-Wan Lee (FIDIC president), Mr. Nugroho Pudji Rahardjo (The president of the National Association of Indonesian Consultants known as INKINDO) and Mr. Basoeki Hadimoeljono (Minister of Public Works and Housing in Republic of Indonesia). The following panels were held in sequence:

- Plenary 1- Resilient Infrastructure- What Constitutes Resilience?
- Plenary 2- Infrastructure Needs, Benefits and Investment
- Plenary 3- Modeling and Digital Technology in Planning for Resilience
- Plenary 4- Strategies, Planning, Sustainability and Resilience

➤ YPFSC Annual Meeting

The meeting was held at 14:00 P.M to 15:30 P.M at Maleo Room. In addition to the scheduling of the YPFSC 2018 agenda, the meeting was to coordinate among the members of the YPFSC for a meeting with FIDIC EC members in order to determine the next year's path of this group in line with the FIDIC policies.



➤ FIDIC Gala Dinner & Awards Ceremony

Gala Dinner was held at Raffles Hotel including different speeches and activities, mostly related to FIDIC awards for projects and professionals. The YPs Award 2017 ceremony which was held for the second year was given to Mr. PrashantKapila from India for his overall professional success and achievements. Besides, special recognition was allocated to Mr. Ben Freedman from United Kingdom. The purpose of the YP award is to acknowledge and promote the remarkable achievements of YPs to the consultancy engineering worldwide and encourage effective participation of YPs in FIDIC.



Day 2: Tuesday, 3rd of October

➤ YPFSC and FIDC EC members' meeting and breakfast

The second day started at 7:00 A.M by an invitation for breakfast from FIDIC Executive Committees (EC) members to YPFSC. At the meeting, the chair of YPFSC, Ms. JomanahAlBtoush, reported on the SC's achievements in 2017. Then she talked about the FIDIC policies in relation to the YPF and the EC members mentioned that they will continue supporting YPs.



After that the conference continued through the following panels:

- Plenary 5- Disaster Risk Mitigation Strategies
- Plenary 6- Resilience and Disaster Risk Mitigation in Projects
- Plenary 7- Designing Resilient Infrastructure
- Plenary 8- Effective Consulting Services to Support resilient

In the evening, the conference was closed by Conference Closing session, General Assembly Meeting (GAM 2017) and the Local Color Night Dinner at "Fairmont Hotel".

Hope that you have enjoyed this report that summarizes YPs achievements and progress in 2017, YPFSC is looking forward to further progress and achievements in 2018 and to welcome you all in person in FIDIC Berlin Conference in September 2018.