



# SRI LANKAN CONSULTING ENGINEER



Newsletter of the Association of Consulting Engineers, Sri Lanka  
(Founded in 1980, Incorporated by Act No. 42 of 2003)

A Member Association of  
the international Federation  
of Consulting Engineers

**July 2008**

**Issue 17**

## KEEP IN TOUCH WITH THE ASSOCIATION OF CONSULTING ENGINEERS, SRI LANKA

### COUNCIL MEETINGS & ACTIVITIES

Since the issue of the last Bulletin, the following Council Meetings were held during the period 20<sup>th</sup> February 2007 to 18<sup>th</sup> January 2008.

- Council Meeting No. 205
- Council Meeting No. 206
- Council Meeting No. 207
- Council Meeting No. 208
- Council Meeting No. 209
- Council Meeting No. 210

The Annual General Meeting was held on 25<sup>th</sup> January 2008.

Subsequently following Council Meetings were held up to May 2008.

- Council Meeting No. 211
- Council Meeting No. 212
- Council Meeting No. 213
- Council Meeting No. 214
- Council Meeting No. 215
- Council Meeting No. 216
- Council Meeting No. 217

At the AGM the same committee as that for the previous year was re-elected due to the absence of any new nominations. At the Council Meeting held on 14<sup>th</sup> February 2008 the members elected the following Office bearers for the year 2008/2009.

- Mr. D.P.T. Munasinghe - President
- Mr. K. Suntharalingam - Vice President
- Mr. B. Senaratne - Hony. Secretary
- Mr. Upali Delpechitre - Hony. Treasurer
- Mr. R.M.A. Senarath - Council Member
- Mr. T.G. Perera - Council Member
- Mr. H.P.R. Gunawardena - Council Member
- Mr. T.P. Ranaweera - Council Member
- Mr. G.E.M. Gomez - Council Member  
(Editor)
- Mr. J. Karunaratne - Council Member
- Mr. Malith Mendis - Council Member

The main activities of the Association during this period since the last bulletin in March 2007 were:

- More engineers were enrolled as members of AECESL. The total membership of the Association stands as follows :  
Member Firms - 12  
Individual Members - 64
- The President attended the Annual FIDIC 2007 Conference held in Singapore from 9<sup>th</sup> to 13<sup>th</sup> September on behalf of the Council.
- The Vice President attended the TCDPAP (Technical Consultancy Development Programme for Asia and the Pacific) conference held in Seoul, Korea from 22<sup>nd</sup> to 25<sup>th</sup> April 2008 on behalf of the Council.
- The President and Hony. Secretary represented the association at the Chamber of Construction Industry Council.
- The ACESL was represented by the President as it's nominee to participate in re-drafting the Engineering Council Act for Registration of Engineers, with the Institute of Incorporated Engineers.
- Upgrading the web site of the Association of Consulting Engineers, Sri Lanka
- Organizing a 2-Day FIDIC course on "The Responsibilities and Management of Dispute Adjudication and Dispute Boards under the FIDIC Contract Conditions 1999 Editing and the MDB Harmonized Construction Contract, 2006" on May 26<sup>th</sup> and 27<sup>th</sup> 2008 (More details are given in the bulletin)

### FIDIC NEWS

#### FIDIC 2007 SINGAPORE

Consulting engineers play a unique and increasingly important role in a global economy, where society seeks the highest quality at the local level. The International Federation of Consulting Engineers (FIDIC 2007) Singapore conference explored the key elements for successful relationships to deliver quality services globally across a broad range of sectors.

Singapore, strategically located off the southern tip of the Malay Peninsula between the South China

Sea and the Indian Ocean, is a city-state with a population of 4.6 million that has become one of the commercial powerhouses of Asia. Lying at the heart of a fast-growing region with many infrastructure developments in progress, it is the gateway to countries with over three billion people, where east meets west in a multicultural and modern city full of old-world charm. Participants at Singapore's FIDIC 2007 Conference, which was organized jointly by FIDIC and Association of Consulting Engineers Singapore (ACES), was able to witness at first-hand the rich blend of ancient and modern traditions as well as the success factors for the region's rapid development.

The conference took place at the heart of the city of Singapore, in the state-of-the-art Suntec Singapore conference complex situated next to the central business district. The main conference hotel, the Conrad Centennial, is within easy walking distance. Nearby are major building complexes, including the Esplanade, and the historic Supreme Court, which blend in with majestic buildings as testaments to Singapore's colourful cultural and rich history.

The FIDIC 2006 Budapest Conference highlighted the industry's capacity to offer quality services at the crossroads between acting either as a trusted advisor or as a commodity supplier. FIDIC 2007 Singapore carried forward the outcomes by exploring the essentials for developing successful relationships with colleagues, clients and other professionals. It aimed to identify strategies for overcoming barriers to cooperation and for enhancing partnerships, both within the industry and with other sectors responsible for supplying today's vital infrastructure and other services.

The conference started with a Welcome Reception in the unique Asian Civilisations Museum on Sunday evening, 9 September 2007. After the opening ceremony in Suntec's main auditorium on Monday, 10 September 2007, the business programme started with the opening plenary session. Speakers from industry, non-governmental organizations, government and the political arena reviewed today's achievements as well as tomorrow's challenges in the era of globalisation, with its consolidation of major trading blocs in Europe, Asia, and the Americas. They highlighted the ingredients- political, cultural, business and personal – for successful partnerships to meet the ever-increasing demand for quality infrastructure.

Tuesday, 11 September 2007, was taken up with workshops, where the themes developed in the plenary presentations were explored in detail. Wednesday, 12 September 2007, started with a plenary session that reported on the outcome of the workshops and an action plan for participants. It was

followed by business practice workshops and regional networking events. Wednesday afternoon began with the FIDIC 2007 Future Leaders Workshop organized by young professional's management trainees. It was followed by the FIDIC General Assembly Meeting and a Young Professionals Forum meeting. A Gala Dinner took place at the exotic Shangri-La Hotel on Orange Grove Road.

Throughout the conference there was a lively and entertaining series of optional events and tours, and a full programme was offered for accompanying persons. Exciting and interesting three and four-day post-conference tours to nearby Malaysia and Indonesia were also available.

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## EDITOR'S NOTE

### WATER RESOURCES – A GLOBAL VIEW

Water resources are special. In their natural states they are beautiful. People like to live and vacation near rivers, lakes and coasts. Water is also powerful. Water can erode rock, alter existing landscapes and form new ones. Life on this planet depends on water. Most of our economic activities consume water. All of the food we grow, process and eat requires water. Much of our waste is transported and assimilated by water. The importance of water to our well-being is beyond question. Our dependence on water will last forever.

So, what is the problem? The answer is simply that water, although plentiful, is not distributed as we might wish. There is often too much or too little, or what exists is too polluted or too expensive. A further problem is that the overall water situation is likely to further deteriorate as a result of global changes. This is a result not only of climatic change but also of other global change drivers such as population growth, land use changes, urbanization and migration from rural to urban areas, all of which will pose challenges never before seen. Water obviously connects all these areas and any change in these drivers has an impact on it. Water has its own dynamics that are fairly non-linear. For example, while population growth in the twentieth century increased three-fold-from 1.8 billion to 6 billion people –water withdrawal during the same period increased six-fold! That is clearly unsustainable. Freshwater, although a renewable resource, is finite and is very vulnerable. If one considers all the water on Earth, 97.5% is located in the seas and oceans and what is available in rivers, lakes and reservoirs for immediate human consumption comprises no more than a mere 0.007 per cent of the total.

This is indeed very limited and on average is roughly equivalent to 42,000 cubic kilometers per year.

If one looks at the past thirty years only in terms of reduction in per capita water availability in a year the picture is even more disturbing. While in 1975 availability stood at around 13,000 cubic meters per person per year, it has now dropped to 6,000 cubic meters; meanwhile water quality has also severely deteriorated. While this cannot be extrapolated in any meaningful manner, it nevertheless indicates the seriousness of the situation. This will likely be further exacerbated by the expected impacts of climate change. Although as yet unproven to the required rigorous standards of scientific accuracy, increasing empirical evidence indicates that the hydrological cycle is accelerating while the amount of water at a given moment in time remains the same. If this acceleration hypothesis is true then it will cause an increase in the frequency and magnitude of flooding. At the other end of the spectrum, the prevailing laws of continuity mean that the severity and duration of drought will also increase. These increased risks are likely to have serious regional implications. Early simulation studies, carried out by IHP, suggest that wet areas will become even more humid while dry areas will become increasingly arid. This will not occur overnight; similarly, appropriate countermeasures will need time to establish policies that integrate the technical and social issues in a way that takes appropriate consideration of the cultural context.

Tremendous efforts and political will are needed to achieve the two water related Millennium Development Goals (MDGs), that is, to halve the number of human beings who have no access to safe drinking water and adequate sanitation facilities respectively, by 2015. In the case of drinking water, we have 1.2 billion fellow human beings that have no access to safe drinking water, while in the case of sanitation, the figure is 2.4 billion.

The substantial growth of human populations—especially as half of humanity already lives in urban areas and the consequent expansion of agricultural and industrial activities with a high water demand, have only served to increase problems of water availability, quality and in many regions—waterborne disease. There is now an increasing urgency in the UN system to protect water resources through better management. Data on the scale of deforestation with subsequent land use conversion, soil erosion, desertification, urban sprawl, loss of generic diversity, climate change and the precariousness of food production through irrigation, all reveal the growing seriousness of the problem. We have been forced to recognize that society's activities can no longer continue unchecked without causing serious damage to the very environment and ecosystems we depend

upon for our survival. This is especially critical in water scarce regions, many of which are found in the developing world and are dependent on water from aquifers that are not being recharged as fast as their water is being withdrawn and consumed. Such practices are clearly not sustainable.

Proper water resources management requires consideration of both supply and demand. The mismatch of supply and demand over time and space has motivated the development of much of the water resources infrastructure that is in place today. Some parts of the globe witness regular flooding as a result of monsoons and torrential downpours, while other areas suffer from the worsening of already chronic water shortages. These conditions are often aggravated by the increasing discharge of pollutants resulting in a severe decline in water quality.

The goal of sustainable water management is to promote water use in such a way that society's needs are both met to the extent possible now and in the future. This involves protecting and conserving water resources that will be needed for future generations.

*By kind courtesy of an article by Mr. Andras Szollosi-Nagy, Deputy Assistant Director General, UNESCO and Secretary, International Hydrological Programme)*

*The editor is also a former Secretary, Sri Lanka Sector of the IHP-1975-1977*

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### **The FIDIC Course held on 26th & 27th May 2008**

The Course was constructed by Mr. B.W. Totterhill, BSc.(Hons); FICE; FIPENZ; FCIARB; FFB; on the theme "The Responsibilities and Management of Dispute Adjudication and Dispute Boards under the FIDIC Contract Conditions 1999 Edition and the MDB Harmonized Construction Contract, 2006". The course was structured into 6 sessions. Each session was followed by questions and answers by both the presenter and the participants. More than 125 representatives from both public and private sector institutions participated in the course.

Some of the highlights of the course can be summarized as follows:

- Session 1 - Adjudication Principles
- Session 2 – DB Establishment and Responsibilities
- Session 3 - Procedural Rules
- Session 4 - Dispute Time Table and Position Papers
- Session 5 – Hearing
- Session 6 - Dispute Decision

- The impetus to resolve disputes through setting up of DAB arose due to the inordinate delays and enormous cost involved in the traditional arbitration procedures. The DAB as pre arbitration procedures was not only less time consuming but also result in not only cost saving for both the employer and the contractor but also a prior idea of what the cost commitment would be for such dispute resolving procedure. Only when the DAB fails to resolve the dispute, the parties have to resort to the arbitration procedure.

- Depending on the complexity and the magnitude of the project either one member or the 3 member DAB is chosen. The latter having the advantage of having a mix of different disciplines that may be appropriate to the particular project.
- The one person adjudicator can be appointed as a retainer or a full time member as may be agreed by both the employer and the contractor.
- Both the employer and the contractor not only share the cost of the DAB equally but also are fully aware of the cost implication.

The course sessions were concluded by a vote of thanks.

A certificate of participation in the course was issued to all the participants.

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### **TCDPAP Conference**

#### **Value Networking of Regional Synergies**

Korea Engineering & Consulting Association (KENCA) jointly with the Technical Consultancy Development Programme for Asia and the Pacific (TCDPAP), which is a United Nations Initiative, and the International Federation of Consulting Engineers (FIDIC)/Member Associations in the Asia and Pacific Region (ASPAC) organized a regional conference on the theme “The Role of Engineering in the Globalization Era” on April 22-25, 2008 in Seoul, Korea.

The conference focused primarily on the role of consulting engineers and their partners, analyzing their roles in design, supervision and management services in the globalization era. It also presented a platform for sharing experience and networking regional synergies.

The conference was a joint event and was addressed by many international personalities including the presidents of FIDIC, TCDPAP and ASPAC and the Chairman of KENCA. The four-day event was educational as well as recreational which included, beside technical sessions, sightseeing, a technical tour and a special programme for accompanying persons. The meeting of the eighth Executive Committee of TCDPAP and the ASPAC Committee meeting was also held during the conference.

About 25 national delegations representing member countries of TCDPAP and FIDIC/ASPAC, including member countries of United Nation Economic and Social Commission for the Asia and the Pacific (UN-ESCAP), participated in the conference.

### **Main topics discussed at the conference**

1. The Role of Engineering in the Globalization Era
2. Economic Development and the Role of Engineering
3. Solving the Disparity in Engineering Techniques
4. Outsourcing : Human Resources
5. PPP(Public Private Partnership) and Procurement of International Funding

### **Country Paper from Sri Lanka**

Mr. K. Suntharalingam, Vice President, ACESL presented the country paper. The paper touched on the following aspects:

1. Introduction on Demography, literacy and international reputation as a Democratic country.
2. The incorporation of ACESL as a legal entity and it’s advantages.
3. The capability of the level of Consultancy Engineering Community to compete on equal terms with Foreign Consultancy Agencies.
4. An overview of all Infrastructure projects presently on-going or completed.
5. Impact of Climate Change and the Tsunami Disaster on Sri Lanka

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## **The Potato Company**

### **(Food for Thought)**

**(An e-mail received by the Editor)**

An unemployed man is desperate to support

his family of a wife and three kids. He applies for a janitor's job at a large firm and easily passes an aptitude test. The human resources manager tells him, you will be hired at minimum wage of \$5.35 an hour. Let me have your e-mail address so that we can get you in the loop. Our system will automatically e-mail you all the forms and advise you when to start and where to report on your first day."

Taken back, the man protests that he is poor and has neither a computer nor an e-mail address. To this the manager replies, "You must understand that to a company like ours that means that you virtually do not exist. Without an e-mail address you can hardly expect to be employed by a high-tech firm. Good day." Stunned, he then leaves not knowing where to turn and having \$10 in his wallet, he walks past a farmers' market and sees a stand selling 25 lb. crates of beautiful red Potatoes. He buys a crate, carries it to a busy corner and displays the Potatoes. In less than 2 hours he sells all the potatoes and makes 100% profit. Repeating the process several times more that day, he ends up with almost \$100 and arrives home that night with several bags of groceries for his family. During the night he decides to repeat the potato business the next day. By the end of the week he is getting up early every day and working into the night. He multiplies his profits quickly. Early in the second week he acquires a cart to transport several boxes of potatoes at a time, but before a month is up he sells the cart to buy a broken-down pickup truck. At the end of a year he owns three old trucks. His two sons have left their neighborhood gangs to help him with the potato business, his wife is

buying the potatoes, and his daughter is taking night courses at the community college so she can keep books for him. By the end of the second year he has a dozen very nice used trucks and employs fifteen previously unemployed people, all selling potatoes. He continues to work hard. Time passes and at the end of the fifth year he owns a fleet of nice trucks and a warehouse that his wife supervises, plus two potato farms that the boys manage. The potato company's payroll has put hundreds of homeless and jobless people to work. His daughter reports that the business grossed over one million dollars. Planning for the future, he decides to buy some life insurance. Consulting with an insurance adviser, he picks an insurance plan to fit his new circumstances. Then the adviser asks him for his e-mail address in order to send the final documents electronically. When the man replies that he doesn't have time to mess with a computer and has no e-mail address, the insurance man is stunned. "What, you don't have e-mail? No computer? No Internet? Just think where you would be today if you'd had all of that five years ago!" "Ha!" snorts the man. "If I'd had e-mail five years ago I would be sweeping floors at Microsoft and making \$5.35 an hour." Which brings us to the moral of the story: Since you got this story by e-mail, you're probably closer to being a janitor than a millionaire. Sadly, I received it too.

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