

Issue 04 December 2010



President's Column

Warm Greetings to All SPEA Chapters

We are just about to reach the end of the year 2010, the year that celebrates a vital milestone to SPEA since its inaugural launching in March. SPEA may be seen as moving at a crawling pace but like any long journey, it always starts with a single step. I wish to stress that we did cover a significant array of items related to our long term goals for improving engineering in our Pacific Region. I like to acknowledge with gratitude the positive response from the *Pacific Island Forum* (PIF) recently that they welcome SPEA and would like to consider us as an important (natural) arm of the PIF. I would like to see SPEA taking full advantage of this positive gesture from PIF. It is unfortunate however that we were not able to attend the Climate Change seminar in Hamilton in November 2010 due to limited funding resources but I do hope that we will attend these engineering related seminars when we are fit to do so.

I was recently invited by the Samoa *Ministry of Commerce, Industry and Labour* (MCIL) to talk about SPEA in a Workshop conference held in Apia in late November 2010. It was fitting as MCIL wants to see how the Engineering fields in general can help serve better the community enhancing *Tradesmen* careers. The fields of plumbers, electricians/electronics, mechanics, soil technicians, environmental, carpentry,

National Chapters

The Fiji Institution of Engineers (FIE), Institution of Engineers Papua New Guinea (IPENG),
Institution of Professional Engineers Samoa (IPES), Tonga, Vanuatu, Cook Islands

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refrigerations, etc, were all covered in this workshop. It was indeed an eye opener to most attendants because of the common mutual relationships that exist in all disciplines. The common goal was to legalise these various fields to make sure that qualifications, regular capability assessment, registration, keeping up with technologies, are shared by all trades. The bottom line was to ensure that only qualified and trained skilled people to provide the service. Samoa has just established a new *Plumbing Association* for the first time. I was elected their patron and am happy to serve. I feel that anything to do with water resource in the globe is paramount due to its scarcity that is becoming obvious. To save water is imperative and therefore, trained and skilled plumbers are needed. This initiative is part of the Japanese multilateral assistance through JICA. I hope the same effort can be repeated in other Pacific Island Nations.

IPES was also invited by MCIL to present the Professional Engineers role. Current president, Fonoti Perelini Perelini, made a good presentation which, by and large, parallels the same goals that SPEA wants to see happen. I would like to see and promote the same efforts in all our Pacific Island Chapters. It does relate to the new WTO effort that is filtering through the many countries of the world. I think the Pacific Region, through SPEA, must be up-to-date with it.

It was learnt from our October teleconference that the Tonga, Vanuatu and Cook Islands Chapters are currently progressing well with the setting up of their local Constitutions proceeding into the implementation of legal Acts and Regulations. We must aim to complete all these by early 2011. Because we believe that many other Pacific Island Nations are keen to join SPEA, as they see the multi-benefits that come after, we must keep encouraging them to support us and be members of the SPEA family.

Seeing the Fiji Chapter (FIE) initiating and continuing SPEA efforts to help established a relationship with UNICEF which is a potential funding source for the development of Standards and building codes. This is encouraging indeed.

The PNG Chapter (IEPNG) is understood to have enhanced relationship with Engineers Australia to address competent assessment and accreditation to conform to international standards and good practice. For example, Assessor training within IEPNG has been in progress with the help of Engineers Australia is continuing.

The Samoa Chapter (IPES) has completed and submitted its “Regulations” and “Corporate Plan” to become more in line with SPEA for consistency. IPES has already lodged its “Regulations” document for approval by the Samoan Cabinet before the end of 2010. Long term “Corporate Plans” are complete ready for its official launching.

I wish to acknowledge the obvious positive supports from all SPEA Chapters in committing their efforts to improving SPEA. I want to thank IPENZ and Engineers Australia for their continuing support in the development of SPEA now and the immediate future. I look forward to another challenging and successful year in 2011.

To conclude, I wish all SPEA Chapters and their members, intending chapters, our immediate partners (IPENZ and Engineers Australia) and other Organisations (SPIES, SPPEXX, EWB, AU, NZAID, NIWA, PCEE, ASCE, to name a few), and other interested colleagues, a *Merry Christmas and a safe Happy New Year*.

God Bless All.

Thank you.



Leiataua Tom Tinai

President

News from FIJI

- The Fiji Institution of Engineers (FIE) had organised several more continuing professional development events including a successful event on the wind design code.
- The FIE has been working with senior government officials to develop a model for a new registration act for professional engineers, based on the Chartered Professional Engineers of New Zealand Act 2002. The intention is to replace the previous registration act with a registration system more suited to the present regulatory and engineering practice environment in Fiji.
- The FIE continued to liaise with both the Fiji National University and the University of the South Pacific in regard to development of professional engineering qualifications and lifting of engineering technologist and technician education to match international good practice. The policy position paper from SPEA on the engineering education needs of the region is being used as a guide. Two University of the South Pacific visitors have recently observed an accreditation visit to the University of Auckland.

News from VANUATU

- Discussions with Government in regard to formation of a national engineering institution and a possible system for registration of engineers are continuing. The focal point of contact is the Ministry of Infrastructure. Early indications are of strong governmental support.

- An informal working group of engineers is developing the proposed constitution of the Vanuatu Institution of Engineers with the goal of having it in place before the April 2011 meeting of the SPEA Council. A part of the work is to determine what specific local rules are required to fit in the Vanuatu legal framework. At the April 2011 meeting Vanuatu aims to be able to present the credentials of the institution for it to be formally recognised as the Vanuatu national chapter.
- Leading engineering representatives have presented the three SPEA policy papers to the Vanuatu Government.

News from COOK ISLANDS

- The interim committee formed by engineers in the Cook Islands has met with the Ministry of Infrastructure and Planning – government officials have indicated their general support for IECl being formed.
- The development of the logo for the Institution of Engineers Cook Islands (IECI) is underway with the ceremonial adze to be used as part of the symbol.
- The cyclone recovery project in Aitutaki is proceeding well. This exemplifies the value of recognising and utilising engineering resources in a maritime Pacific nation.

News from PAPUA NEW GUINEA

- IEPNG is expecting new resources to be allocated by Government to allow the Institution to assist University of Technology, Lae, PNG to further develop its engineering degree programmes to international best practices in compliance to the Washington Accord. This activity is guided by a report that was undertaken by Engineers Australia who have recommended strategies that the University in Lae, the PNG Government and IEPNG to implement to enable engineering programs at UNITECH to be accredited to international standards.
- The IEPNG subs now include a component explicitly designated to meet the costs of involvement in SPEA – the IEPNG is invoicing members in December 2011.
- Many major engineering development projects are proceeding in PNG at the moment. This has increased requirements on the IEPNG as the registration body for engineers. IEPNG has had to develop new application forms and processes to cope with the types of applicant arriving in the country to undertake project work.

News from SAMOA

- The Institution of Professional Engineers Samoa has awarded annual technical scholarships to 12 students from 4 different schools towards engineering education.

- The IPES is undertaking a number of organisational review actions including developing a corporate plan for the IPES, reviewing the continuing suitability of the national registration act for engineers, and reviewing the Institution Rules.
- The IPES recently set up an Interview Committee to conduct the professional interview of one applicant using updated procedures and criteria, is investigating training on ethics and education both for young engineers and the general members, and has established a subcommittee to approve and monitor who can sign off and certify drawings and documents for construction.
- IPES is working closely with the Samoa Government (through the Minister of Works and its CEO) to discuss matters like outsourcing to the private sector due to shortage of resources within the public sector and enforcing of the registration act with respect to the supply of engineering services and the need for any professional engineer doing work for implementing Samoa to register with the local Institution (IPES).

News from TONGA

- The interim committee is working towards incorporation of the Institution of Professional Engineers Tonga (IPET). Planning is well underway towards election in November of the first Committee of IPET.
- Discussions have been held with the Disaster Management Office to ensure that the engineering resources in Tonga are effectively used in the event of a natural disaster or hazard event of significant magnitude.

WORLD FEDERATION OF ENGINEERING ORGANISATIONS LAUNCHES A CAPACITY BUILDING GUIDEBOOK

At its recent meetings held in Buenos Aires, the World Federation of Engineering Organisations (WFEO) launched a guidebook on the building technical capacity. This work was conducted by the Standing Committee on Engineering Capacity Building, and included a substantial contribution from New Zealand. Capacity building can be defined as:

“The building of human, institutional, and infrastructure capacity to help societies develop secure, stable, and sustainable economies, governments, and other institutions through mentoring, training, education, physical projects, the infusion of financial and other resources, and, most importantly, the motivation and inspiration of people to improve their lives.”

Although the principle seems simple, achieving success in capacity building will only occur if a systematic approach based on best practice is adopted. That approach requires attention to the six “pillars” of capacity building which are:

- Individual – to ensure that the needs of the individual technical practitioner are met.
- Institutional – to ensure there are educational, professional, technical and statutory institutions in place.
- Technical – to ensure there are technical standards, technical literature and guidance material to underpin and support good engineering and technological practices.
- Decision-making – to ensure decision makers have sufficient information or access to knowledge and skills to make logical and rational decisions.
- Business – to ensure there are stable and responsible business, commercial enterprises and financial institutions.
- Resources and supplies – to ensure that there is access to appropriate, affordable and suitable materials to use in building and maintaining of infrastructure.

This guidebook presents a compilation of advice drawn from the experiences of the international engineering community, clustered under a set of headings which represent an idealised capacity building project:

- Researching Needs and Desires in Participating Nations – how to work with participating communities to establish their needs and desires, with particular emphasis on how authentic information can be obtained by external agencies.
- Defining and Influencing Public Policy – how to work with governments in participating nations to make the case for the shifting of resources towards capacity building programmes, particularly emphasising the international evidence that building technical capacity has been vital to building prosperity in nations,
- Education, Training and Developing Skills – means for development and implementation of qualifications, ethics and competence standards in participating nations, including building of skills in the educators themselves, providing suitable teaching resources, and using support from the international community,
- Participation - attracting citizens of countries into engineering and technology education to build a local or indigenous technical skills base,
- Building Networks and Support Systems – how to build structures and institutions to support the above,
- Technical and Business Standards – how to develop a framework of standards and appropriate systems to improve adherence, or ultimately to achieve enforcement of such standards,

- Project Execution throughout the Lifecycle – identifying key success factors that take projects from plans to success,
- Gaining and Using External Funding – guidance on how to obtain external funding is presented, from a range of agencies.

A number of case studies are presented to illustrate where there can be different needs, including the South Pacific island nations, war-torn nations which have rebuilding needs, and oil-rich nations.

The capacity handbook can be downloaded via this link:
<http://www.civils.org.za/Publications/tabid/81/Default.aspx>

PACIFIC EARTHQUAKE ENGINEERING WORKSHOP

In conjunction with the Pacific Earthquake Engineering Conference to be held in Auckland in April 2011 it is proposed to hold a Pacific Earthquake Engineering Workshop. The goal is to share best practice in responding to and then recovering from a major earthquake event in the region. The chapters have been asked to identify three potential delegates to attend the workshop if funding can be obtained. It was agreed that these be a building controls official, a representatives of the Disaster Management office, and a lead engineer.

PROTOCOLS WITH ENGINEERS WITHOUT BORDERS NEW ZEALAND (EWB) AND SOUTH PACIFIC PROFESSIONAL ENGINEERING EXCELLENCE (SPPEEx)

Engineers Without Borders New Zealand is an organisation of professional and student engineers who share a vision to confront global challenges of poverty, sustainable development and social inequity by undertaking projects that will directly improve the quality of life in communities within New Zealand and in the South Pacific region. EWB and SPEA have agreed an operating protocol. This includes a commitment to regular and ongoing communication. It also establishes principles by which when EWB is intending to undertake a project in a particular nation which has a national chapter of SPEA for there to be a cooperative approach. The goal is to ensure that the project aligns with local needs as viewed by the local chapter and that local engineers are involved to assist the project and ensure its longevity to the benefit of the participating community.

SPPEEx is based in New Zealand with membership open to Maori & Pacific Island engineering professionals all over the globe. A key focus of SPPEEx is the advancement of the Maori and Pacific people and increasing the awareness of indigenous technology in the engineering profession. SPEA and SPPEEx have agreed an operating protocol. This includes a commitment to regular and ongoing communication. It also establishes principles by which SPPEEx and SPEA national

chapters should work together when SPPEEx or groups of its members wish to undertake activities within South Pacific nations. The goal is to ensure early information sharing and ongoing cooperation throughout the activity to the greatest benefit of the people involved in the activity, whether these be the engineers themselves or a participating community.

EMERGENCY MANAGEMENT CONTACTS

The SPEA web site now contains emergency contact personnel and their telephone and email addresses for some SPEA national chapters, and others will be added as they become available. These are intended to assist in the event of any major natural disaster.

NEXT MEETINGS OF THE COUNCIL

The next teleconference will be organised between Wednesday 26 January and Friday 28 January 2011.

The Institution of Engineers Papua New Guinea has put in place preliminary arrangements for the next face-to-face meeting in April 2011. The Council meeting is being planned as a three day event with tours to various projects in addition to the two day Council meeting.