



Interpreting the Environment &
Pioneering Change

INSIDE TRACK

THE SOUTH AFRICAN ASSOCIATION OF CONSULTING ENGINEERS



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The South African Association of Consulting Engineers (SAACE) has just released a new Risk Management Implementation Guideline for Consulting Engineers written by Dr. Hendrik Kirsten, Professor of Civil Engineering at the University of Johannesburg, supported by Johan van Rensburg of LC Consulting.

Dr. Hendrik Kirsten has been able to conceptualize this guideline based on his experience in applying probability theory to engineering design and operational decision making over more than twenty five years in more than fifty

Risk Management Implementation Guideline for Consulting Engineers

'To manage risk is to favourably improve the odds of uncertainty by proactive decision making.'

projects over a broad spectrum of applications. Mr. Johan van Rensburg of LC Consulting assisted Dr. Kirsten to a considerable extent with the preparation of this guideline.

This is not just another guideline on risk management. It is a guideline detailing the *implementation* of good risk management procedures in engineering practice. In doing so it mirrors what has been said over the years in various documents on the subject, some of which have been produced by FIDIC and a number of Associations of Consulting Engineers, but goes a step further by illustrating practical methods of implementation. Dr Kirsten contends that, "Risk and Quality Management are two sides of the same coin that can neither on their own assure the successful outcome of your business."

Quality Management is aimed at improving the effectiveness and efficiency of your business by enhancing the capacity of your business and by assuring its robustness against internal and external threats. Risk management on the other hand protects your

business against internal and external threats. It can vary in complexity from a simple set of house rules on business ethics and conduct to an advanced system in which risks are systematically dealt with. Dr Kirsten believes that, "The important thing is to systematically manage both risk and quality in order to maximize the success of your business."

The main purpose of the guideline is to help consulting engineers to systematically implement risk management in their practices.

There are many risk management guidelines and much related literature, and yet these are not as widely and frequently used as they should. The purpose of the guideline is to bring together the most relevant of this material and make it available for practical application. The guideline is therefore not another risk management manual but a guideline on how to implement risk management.

Another purpose of the guideline is to raise a specific awareness of the importance

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Dr. Hendrik Kirsten and Johan van Rensburg



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of risk management in engineering practice in its complementary relationship to quality management the nature of which may be illustrated by some general life examples. To lead a healthy lifestyle by following a balanced diet, sleeping sufficiently and exercising regularly is more quality than risk management. On the other hand, to avoid being overweight, take anti-malaria

medication or not to drink before driving is more risk than quality management. Quality management in general enables the body to better withstand the onslaught of illness and disease, compared to risk management which aims at reducing exposure to circumstances that lead to illness and disease. Risk and quality management both need attention to achieve the best overall result.

A third objective of the guideline is to point attention to the difference between general and specific risk management. The practicing engineer can rest assured if all the advice in this guideline is followed diligently, which is in any event part of good engineering practice, that potentially adverse events to the business will in general be greatly preempted. Once the general risk profile of a

business has been raised as best as possible by good practice, it remains as the next step of refinement to identify and determine the potential incidence of specific risks to which the business may be prone and to implement appropriate mitigating measures. For this purpose the practicing engineer will have to go beyond this guideline.

YPF Means Business

Engineering must be promoted as a career of choice and major efforts must be made to continuously develop and retain Young Professionals in the industry.

The Young Professionals Forum (YPF) Business Plan for 2007 was presented to the Association's Council during May by Richard Dlamini, Chairman of the YPF. He comments, "It was well received and very much appreciated by all the members of Council. Council has provisionally approved the plan pending a meeting of the Executive Committee which sits next month in order to determine the funding of the activities put forward in the plan." The presentation was such that Council would like the YPF to take it further and present the concept to Government because they realize that it is not just SAACE issue, but something that the YPF can partner with Government on. The South African Association of Consulting Engineers' Young Professionals Forum was established in 2004, based on similar initiatives to

other countries affiliated with FIDIC and in direct response to the rapid growth in the construction industry; the huge age gap between experienced senior engineers and junior developing engineers; and the migration of qualified young professions to other industries. The YPF has a "vision to be an open, unbiased medium through which Young Professionals in the South African engineering industry may freely air their views, opinions and concerns, and to facilitate the formulation of potential solutions".

The main objective of the YPF is to create awareness of the engineering industry and engineering as a profession and to promote development of high quality professionals in the engineering industry as well as to address relevant issues that affect Young Professionals. After two years endeavoring to find its footing the forum has now re-established its objectives and has mapped in the business plan the process by which it intends to attain these objectives. The plan highlights the purpose of the forum as being a medium to channel

views and proposed solutions to the relevant individuals, organizations and other role players in the industry so as to effect positive change for Young Professionals, provided that the views, opinions or solutions put forward are not offensive in any manner and that the good of the many always takes preference over the good of the few. This has resulted in the following three strategic objectives for the forum: 4.1 Creating awareness of the engineering industry and engineering as a profession through various activities such as engineering awareness day, television, advertisements,

communication to learners at schools and tertiary institutions, etc 4.2 Promoting development of high quality professionals in the engineering industry 4.3 Addressing relevant issues that affect Young Professionals such as shortage of skilled engineers, the retention of young professionals, addressing the age gap; providing fair remuneration; and enhancing the image of the industry. 5. The business plan also highlights in detail how the forum intends accomplishing these objectives with its: Strategic Objectives; Marketing Plan; Operational Plan; and Financial Plan.



Dr. Hendrik Kirsten and Johan van Rensburg

Events Calendar



Interpreting the Environment & Pioneering Change

Date	Description of Event	Venue
18 July	Presidential visit	Limpopo
19 July	Presidential visit	Mpumalanga
26 th July	SAACE Glenrand MIB Engineering Excellence Awards	Sandton Convention Centre
16, 17 th Aug	Presidential visit	North West
24 Aug	Presidential Challenge Golf Day	JCC, Woodmead
8 Sept	Consultants Relay	Pretoria
9 -12 Sept	FIDIC	Singapore
7-9 Oct	SAACE/ SAFCEC AGM and Conference	Somerset West
23 – 26 Oct	IMESA Conference	Durban

ISO 9001:2000 Re-Certification for SAACE



Front l to r: Siphokazi Momoti, Brenda Lacey-Smith, Glenda Tshabalala, Jean Standford
Back l to r: Quentin Koen, Roelof van Tonder, Graham Pirie, James Reid, Gillian Wands, Tony Bradley

The South African Association of Consulting Engineers (SAACE) is proud to announce that they have received their ISO 9001:2000 re-certification through DEKRA-ITS Certification Services based in Germany.

SAACE first received its ISO 9001:2000 certification in April 2004 valid for 3 years with an annual surveillance audit carried out over that period. After the 3 year period the Association had to go through the full on site audit again to remain certified. This was successfully completed in April this year.

Graham Pirie, CEO of SAACE, states that it is critical that the Association maintains a set of minimum requirements encompassing all areas of the organization in order to maintain certification. He states that "It is thanks to our staff and their input during our bi-weekly

Quality meetings that has enabled us to maintain our ISO rating. It has changed the way in which we think and has had a beneficial effect on the manner in which we are able to satisfy the needs of our members".

One of the requirements of being a member of the Association is that member companies must have an ISO based Quality Management System in place although at this stage the Association does not require companies to be ISO certified.

This is in response to Clients increasingly requiring their service providers to have a Quality Management System in place. This has also become an international phenomenon.

The Association will gladly assist companies with the process of implementing a quality management system within their organization.

"Building Knowledge Capacity and Skills for 2010 and Beyond"

The South African Association of Consulting Engineers' President, Cecil Rose is currently in the process of visiting all of the Association's nationwide branches to present his presidential message for the year.

SAVRI staan vir Suid Afrikaanse Vereniging vir Raadgewende Ingenieurs en SAISI vir Suid Afrikaanse Instituut vir Siviele Ingenieurswese.

The guest speaker at this event was Dr Iraj Abedian, Chief Executive from Pan-African Capital Holdings and past economic advisor to President Thabo Mbeki who will give a very informative presentation on "The South African Economy up to 2010 and thereafter, is 2010 a 'bubble'?"



Gauteng North and South Presidential Visit:

Left to right: Cecil Rose, President, Michelle Kruger, YPF, Dr. Iraj Abedian, Pan-African Capital Holdings, Nico Swart, Chairman Gauteng South and Jos Keuris, Chairman, Gauteng North.



Presidential visit to the Free State Branch:

Van links na regs Gert Fourie (Voorsitter Vrystaat Tak van SAVRI), Dawie Botha (Uitvoerende Hoof van SAISI), Graham Perry (Uitvoerende Hoof van SAVRI), Cecil Rose (President van SAVRI vir 2007), Neil Macleod (SAISI President 2007) en Herman Schoeman (Voorsitter SAISI Bloemfontein Tak).

New Focus for SCE

Brenda Lacey-Smith has joined the Association as the newly appointed Manager of the School of Consulting Engineers. She comes from the University of the Witwatersrand, where she was their in-house Conference and Events Organizer. Previous to that, she gained 7 years experience at the South African Chamber of Business (SACOB) in their Marketing Department, assisting with the SACOB Convention, Corporate Member Functions and Seminars, and she also provided secretarial services for outside associations.

Brenda will be responsible for the development of cutting edge, change driven training courses that will address the on going challenges in the industry today and into the future. She is looking forward to working at the Association and establishing a good rapport with the members served by the Association with regard to the School of

Consulting Engineers. She also looks forward to the

wonderful challenge of bettering an already strong and well recognized learning organisation in the ever changing market place for Consulting Engineers.

The Association has recognised the need to refocus the School of Consulting Engineers (SCE) on capacity building of young consulting engineering practices in an endeavour to create enhanced capacity in response to the needs of our growing economy. The SCE will be building material around the FIDIC Guide to Practices document with a view to creating course material in a modular format. The Association recognises the need for this material to be accredited by ECSA as a practice guideline for the category of Consulting Engineering in terms of work relating to the definition of Engineering Work and compulsory registration as well as being CPD accredited material. An added benefit will be that a more formal and closer relationship will be developed with FIDIC in the

use of this guideline which has been the case in other parts of the world where they have been very successful in creating what has become known as a 'FIDIC engineer'.

At the outset and for the foreseeable future this will be a voluntary but very prestigious commitment with added value in the marketplace. The Association will also be instrumental in driving this process up into Africa through the Group of Africa Member Associations (GAMA). The FIDIC Contract Documents are also receiving increase attention as they have increasingly become the document of choice in the marketplace for local and international work.

In addition to driving courses related to the pertinent issues and challenges facing our industry in terms of business needs in the year ahead, Brenda will also be developing courses based on the Risk Management Guideline which has just been published. All member companies will receive a free copy of the guideline and consultants attending the course will also receive a copy of the guideline as part of the course material.

In addition to this, following on from the Procurement Indaba which is now planned for February 2008, Brenda will be

instrumental in developing a road show which will deal with the implementation of procurement policies with a link to the Construction Charter.

Certain activities of the School of Consulting Engineering (SCE) have been outsourced to Life Long Learning Solutions (LLLS), including the production of the LLLS training DVD's and certain CPD courses. All course material remains under the direction and is subject to the approval of the Association through the school. This will allow the School to devote increased energy to matters and issues currently affecting the industry as and when they arise. Members will also be approached in the near future for input as to their training needs for 2008.



Brenda Lacey-Smith

NEW MEMBERS FOR BEPMEDS

BEPMEDS is a closed medical aid scheme servicing the members of the South African Association of Consulting Engineers (SAACE), the South African Institute of Architects (SAIA) and the Association of South African Quantity Surveyors (ASAQS). The scheme offers members of these associations all of the benefits of open medical aid schemes including loyalty programmes and gym memberships together with a number of benefits that have been specifically structured for the industry that result in cost savings to members. It is a scheme managed by professionals for professionals with members having a say in the benefits that they receive from the scheme.

For information on BEPMEDS please contact Vincent Knox, PBC Brokers on 012 460 0430 or email him at vknox@profhealth.co.za



Vincent Knox, MD of PBC and Sakkie van der Vyver, CEO of V&V Consulting Engineers who comments that, "V&V het by Bepmeds aangesluit om rede die professionele risiko saamstelling, die gunstige voordele en ook die voordelige bydrae".

Vincent Knox, MD of PBC and Gideon Steyn, Director of Rawlins, Wales & Partners who commented that, "Rawlins, Wales has joined Bepmeds as a result of the professional administration that they offer to the professional firms, the favourable benefit structure and competitive contributions".



BIRTH OF THE NEW GAMA

At the 14th annual conference of the Group of Africa Member Associations (GAMA) held in Gaborone, Botswana, the African regional grouping of the International Association of Consulting Engineers (FIDIC), reached an important milestone in that a decision was taken to duplicate the manner in which GAMA operates, using the FIDIC template with respect to governance and decision making processes. This will enable it to address the current issues of continuity of office bearers and other decision makers interfering with the effectiveness of the organization. This will allow GAMA to create a sustainable secretariat and to clarify the roles and functions of FIDIC with respect to GAMA and the

constituent member associations. This decision was based on the recommendations of a FIDIC task force that was set up and



presented for comment at the previous conference held in Bagamoyo, Tanzania in 2006. FIDIC President Dr Jorge Dí'92az Padilla, also in attendance at the conference, was pleased to note that "GAMA changed gears at this conference. The grouping had

been growing over a number of years, but had reached a plateau, due to the lack of continuity, but had now become re-energized". The GAMA executive committee now has a four year term and they have been tasked with the implementation of the FIDIC task force recommendations with respect to Quality Based Selection; Best Practices; Corruption and Visibility. FIDIC Africa, as it is also known, needs to caucus to influence the FIDIC mindset with respect to Africa on issues that include building capacity of Member Associations and firms, as well as identifying how to enhance and build the skills base. Dr Padilla believes that GAMA needs to partner with

FIDIC to achieve these objectives. GAMA represents the African sector at FIDIC and is now becoming a more inclusive platform with Morocco, Tunisia, Sudan, Libya and Egypt recently becoming actively involved, resulting in GAMA becoming the 'Voice of Africa'.

The GAMA executive committee has representation from Sudan, Zambia, South Africa (secretariat), Tunisia, Nigeria Tanzania (chairman) and Botswana (treasurer).

The next meeting of GAMA will be held in June 2008 in Tunisia and 2009 in South Africa

'Consulting Engineers – We Shape Your World'

SAACE GLENRAND MIB ENGINEERING EXCELLENCE AWARDS

The Association's annual Engineering Excellence Awards event is being held at the Sandton Convention Centre on the 26th of July this year. The theme is 'Consulting Engineers – We Shape Your World' and is a celebration of quality, outstanding workmanship and professionalism. The Association is proud to host this event that is a showcase for the outstanding achievements of member organizations.

Earlier this year submissions were called for from member companies in the categories:

- Projects with a value of greater than R5million
- Projects with a value of less than R5million
- Business Excellence
- Young Company of the Year
- Nominations for Visionary Client
- Nominations for Young Engineer of the Year

The Awards are adjudicated by a panel of experts and the results are audited. We look forward to both an enlightening and entertaining evening. Please contact Siphon on 011 463 2022 to reserve your table at this prestigious event if you have not already done so.



Happy Retirement

Tony Bradley, Financial Manager of the Association will be retiring at the end of June this year. Tony joined the Association on a part time basis in September 1994 and in August 1995 joined as a permanent member of staff in the position of Financial Manager. Tony has not only been responsible for the finances but also for administration and human resources as well as for the minutes of all the main meetings including the AGM, EXCO and the Finance Committee. Tony also fulfils the role of acting CEO in the absence of Graham Pirie. Over the years Tony has been responsible for providing invaluable advice to clients and members on contract documents and fee scales etc. As far as plans for the future are concerned Tony says, "I am retiring to sit under a tree and enjoy the sunshine". Everyone at the Association bids him a fond farewell including Pieter Conradie who believes, "Tony is more than just a piece of furniture at the Association, he is part of the foundation."



... And Welcome To Our New Fm

In saying farewell to Tony we welcome James (Jimmy) Reid who joined the Association at the beginning of June as the new Financial Manager. Jimmy is a Chartered Accountant and has been a Financial Manager in particular in the Manufacturing/Engineering Industry for small to medium enterprises for over 20 years. Jimmy comments that he can see that the Association is actively involved with its members and he is looking forward to making a positive contribution and getting an overview of this very exciting industry.



Consulting Engineering Services – Value For Money



Cecil Rose, President of SAACE and myself recently attended the 14th GAMA AGM and Convention held in Gaborone, Botswana. The Convention was hosted by The Association of Consulting Engineers, Botswana (ACEB) in collaboration with the Secretariat of the FIDIC Group of Africa Member Associations (GAMA). SAACE currently performs the function of Secretariat to GAMA. The theme of the Convention was 'Engineering Services, Value for Money'. The conference was opened by the Botswana Minister of Works and Transport, Ms. Motsumi.

Countries that attended the conference included Sudan, South Africa, Uganda, Tanzania, Tunisia, Nigeria, Zimbabwe, Zambia, Kenya, Swaziland and Botswana. Nine delegates attended from South Africa including three speakers: Arthur Taute, Vela VKE who delivered a paper on 'Developing a Professional Engineering Industry' and Kribbs Moodley, PD Naidoo and Associates who delivered a paper on the 'Practical Implementation of the "Expanded

Public Works Programme" (EPWP) Contractor Learnership. Gary Rabie from Glenrand MIB presented a paper on "Risk Management" under the banner of the SAACE School of Consulting Engineering.

Members of SAACE's International Business Development Section (IBDS) are also regular attendants of the conference which they regard to be an excellent opportunity to network and increase their access to business opportunities on the continent. This year a great deal of discussion centred around South African firms utilising African Consulting Engineering capacity to assist with the current boom in construction activity in South Africa leading up to the 2010 Soccer World Cup. As an Association we believe that partnerships formed on this basis will be of mutual benefit in the long term for all firms concerned, especially if the current boom subsides.

While most of the papers that were presented focused on the theme of 'Value for Money' as the essential message, there was a common thread that ran throughout the conference, and that is that all too often the uninformed client does not understand the 'value' concept in their quest for the lowest cost service. This, when it is a known fact that the cost of the professional service that a consulting engineer provides, is in the region of only 2% of the total lifecycle cost of a project. This results in quality and innovation being stifled. GAMA

is appealing for firms to engage with their clients in order to emphasise that quality is paramount. It is important to explain what is meant by 'Engineering Services' and to get clients to understand what they are purchasing and why the services offered by a consultant should have a higher value than it is currently being given credit for.

In order to obtain 'Value for Money' issues of ethics, sustainability, quality and cost all have to be taken into account. Clients often have a higher expectation of quality without appreciating value, making it difficult for Consulting Engineers to deliver in accordance with client expectation. Quality based selection is the cornerstone, cost is not the primary feature, consulting engineering is not a commodity. The Consulting Engineer should be seen as the trusted advisor providing clients with more than just a set of drawings but are concerned with the economic, environmental and social impact of the project. What consulting Engineers produce will be around for a long time and if it is short changed we all have to live with the consequences thereof.

The current procurement systems are compromising the ability of consulting engineers to provide the quality of service required and least cost selection can destroy the industry. Arthur Taute believes that it is important that the industry engages with government to develop a national vision in order to create a Knowledge Economy.

Enrico Vink, Managing Director of FIDIC, who also attended the conference believes that countries around the world are dealing with the same issues, whether developing or developed, with most also having low quality and low fee issues. He believes that it is important to have an Association like SAACE in South Africa, which provides the voice for the industry and that can lobby both public and private sector on these issues.

Other important issues that were dealt with at the conference were Quality Based Selection (QBS), corruption and contract documentation. FIDIC has produced a number of toolkits including their Business Integrity Management System (BMS) and the Government Procurement Integrity Management System which was launched last month at the bi-annual meeting of multilateral development banks in Washington. This system is part of the industry response to world wide concerns of corruption. The system illustrates that firms are serious about eradicating corruption based on the ISO system, showing that firms have integrity management by having quality-based procurement policies in place. This is a challenge that the banks are needing to address in a proactive manner whereby they have produced a system aimed at government procurement.

Graham Pirie

