

## SAACE PRESIDENT QUESTIONS ASSERTIONS ON THE SHORTAGE OF ENGINEERS

**A**t the annual President's Breakfast recently, the new president of the South African Association of Consulting Engineers (SAACE) Althea Povey, questioned assertions that have been made regarding the shortage of engineers.

Says Mrs Povey: "We continually hear contradictory reports regarding the availability of engineers. Some say there is a shortage while others talk of vast numbers of graduates that are unemployed.

"Allyson Lawless recently completed a study, aimed at determining the actual status quo of the graduates and professionals in the industry.

"Data from the study showed that there are two dominant



**Althea Povey addresses the media on issues facing the consulting engineering industry and highlights her presidential focus for the year at the annual media breakfast in January.**

groups, in terms of size, within the civil engineering industry. One large, older and experienced

group with an average age of 56 and another large, young and inexperienced group with an average age of 25.

"This data also indicates that there is a shortage of engineers but only in the 35 to 45 years age group. It may be that the industry does need more engineers but cannot afford to take on young graduates, who require time and money in training, and so the hunt is always on for the experienced 35 to 45 year olds, who are scarce and therefore command high salaries - simple demand and supply economics.

"The question arises as to why firms cannot afford to train graduates or pay the larger salaries demanded by the experienced engineers? I believe that part of the answer lies in the fact that the fees paid to consulting

engineers are too low to allow for increased employment either of the scarce but expensive experienced engineer or the lower salaried graduate who requires time and money in training.

"When we don't get paid adequate fees, not only can we not pay competitive salaries, we can't train people either - and so begins the exit of engineers from the profession."

Althea further highlighted the enormity of the rapidly changing environment which the construction industry is presently experiencing.

"I believe that the greatest challenge presently facing consulting engineers is adapting to the changes and so I have adopted the theme *The Association - your partner in change* for my term of office."

## IBDS LEADS SUCCESSFUL VISIT TO ANGOLA

Angola as an African market for consulting engineers is currently unequalled in terms of opportunities and potential. As a major oil-producing country that has just come out of a protracted war, it does not take a much to come to this conclusion.

Says Roelof van Tonder, manager of the International Business Development Section (IBDS): "The main reason why the IBDS arranges missions is because the IBDS can do certain things that individual members cannot do on a number of fronts.

"This relates to issues such as access to business opportunities, access to decision makers and financing from the DTI. In the case of Angola, Deputy Ministers received the delegation on three occasions and although there were some cancelled appointments early on in the visit, at least 19 appointments were

arranged for delegates.

"Most firms augmented this official programme with appointments of their own so quality access was provided in what can be regarded as a difficult country in which to secure quality appointments. In short an individual firm would find it difficult to arrange a programme of this nature without the IBDS."

Most delegates secured financial support from the DTI, which was often more than the annual subscription fee to the IBDS.

Says Van Tonder: "When we were experiencing problems with appointments early on in the visit, the preparatory work that the IBDS did with the DTI and DFA paid off, as the office of the Ambassador became involved and managed to reschedule a number of important appointments.

"However, it also needs to be stated that there is a lack of

capacity from our government's side to support the special needs of our industry. If it were not supported by the IBDS, there would be a lack of capacity to organise a proper programme."

It was a major revelation to see the interaction between consulting engineers on the visit. Firms not only exchanged information, but also discussed strategies on how they could collaborate to reduce the high cost and risk of penetrating a very lucrative market.

Says Tony Mills of Ninham Shand: "The trip was well-organised and definitely opened doors for us that we would not have been able to as individuals. Well done to SAACE and Roelof. It certainly showed us what the position is in Angola - conditions are extremely difficult and firms should look carefully for opportunities before rushing in."

Says Tom Marshall of Vela VKE: "I personally have been involved in Angola for over 10 years, however, for the majority of participants, it was an invaluable introductory visit to doing business in Angola. Individual firms would never be able to organise these opportunities for themselves, so the main benefit of being a member of the IBDS is that you are exposed to opportunities from a protected environment and have the opportunity to learn from the experiences of other consultants."

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# MEET ALTHEA POVEY

## President 2005 - Your partner in change

**A**lthea Povey, of Kwezi V3 Engineers, is the first woman in the South African Association of Consulting Engineers' (SAACE) history to hold presidential office.

Althea takes over at a challenging time in the Association's history - a time of transition and change, characterised by the development of the Construction Charter process and continued efforts to transform the industry.

"I believe that the greatest challenge presently facing consulting engineers is adapting to the rapidly changing environment the construction industry is presently experiencing, and so I have adopted the theme *The Association - your partner in change* for my term of office.

"My main focus has largely been predetermined by the activities scheduled for 2005, namely the Construction Charter and the Construction Summit both aimed at transforming the construction industry.

"Although the Association's activities will predominantly be focused on working towards these outputs, they will also be aimed at assisting our members with managing the changing environment.

"The changing environment has however been beneficial in many ways - one being the building of closer relationships between the various roleplayers in the construction industry. The construction industry has for a long time been characterized by fragmented and adversarial rela-

tionships. The closer relationships which have developed will be vital for effective communication with government."

Althea was born in South Africa and matriculated in Cape Town in 1976. She completed a B. Sc degree at Stellenbosch University in 1979, obtained a H.D.E. the following year, then continued her studies at Stellenbosch and was awarded a B.Eng in 1984. She obtained a M.Phil from the University of Cape Town in 2002.

Her career in the construction industry spans 18 years and she has been fortunate to have been involved in many and varied civil engineering projects.

Her involvement with the Association spans seven years and includes terms on the



Althea Povey, SAACE President 2005

Western Cape Branch Committee, Branch Chairman of the Western Cape (2001-2002), Chairman of the Communication and Marketing, Finance and Staff, and Membership and Constitution committees, member of the Executive Committee of the SAACE national council, vice-chairman of the SAACE National Liaison committee, first and second vice-president of SAACE.

## PRESIDENTIAL MESSAGE

# Young engineers equipped to adapt to change

"I believe that the greatest challenge presently facing consulting engineers is adapting to change.

In dealing with change, Povey says that young engineers must not be underestimated.

"I believe that our young engineers are well equipped to deal with the demands of a changing environment as they appear to embrace and adopt change more easily. For this reason I feel that they can contribute immensely to the process of change with creativity and innovation.

"Last year the Association officially launched its Young Professionals Forum and I am really proud to be President of the Association at a time when the Association is actively encouraging the input of young engineers.

"The ultimate transformation of our industry will come from within the ranks of our young engineers. Therefore, I see a positive role for all young engineers within the Association structures

where their input into attracting and retaining quality consulting engineers would be invaluable.

"Furthermore, I have great hopes that the young professionals' involvement in the Association structures will also contribute to the transformation of the Association itself.

"I will throughout my presidency continue to call on our member firms to support the YPF initiative in any way they can but particularly by encouraging young professionals in their practices to actively participate in this forum. It is vital that our member firms allow the young engineers the freedom to contribute to the formulation of change since they are the engineers that will take our country into the future.

"However we must never forget the wealth of expertise and skill that our older engineers bring to the industry - without them leading the way there is No Way. We should be celebrating their availability in this country,

be utilizing their enormous experience in mentoring and be proud to have men (and women) that still feel so passionately about their work."

Besides the legislated changes, the consulting engineering environment has also seen changes within its client body. Mrs Povey says that the way in which clients perceive consulting engineers and the way in which they procure services has changed.

"There are two diverse perceptions which exist. Some clients see us as their trusted advisors while others see us as merely hired hands that are required to simply execute instructions. While a trusted advisor will add value to the client's operations, the hired hand will generally not.

"Previous presidents have talked of engineers taking back their pride and being proud of the work they do. I believe we must take this further and show our clients why South African

engineers are aggressively sought after by other countries.

"While on the subject of our clients, it must be mentioned that those designated as organs of state are experiencing a similar changing environment. I believe that we as consulting engineers have the ability and knowledge, to assist these clients with the implementation of change initiatives."

Althea concludes by highlighting that her wish for 2005 would be for closer liaison and meaningful dialogue with government at the highest levels.

"I appeal to government, to begin to view the Association, and the other construction industry bodies as partners and allies, whom you can trust and talk to. Involve us and let us change the industry together. Ultimately, both government and industry have the same goal for a transformed and sustainable construction industry."

# THE MERITS & BENEFITS OF A QMS

By Bob Bruneau

There's an old cliché that says "no pain, no gain". It could very well apply to the implementation of a Quality Management System (QMS) in a Consulting Engineering practice; with the objective being, of course, as much gain as possible with as little pain as possible. The reality of it all is that a consulting engineering firm is as much a commercial business process as any other practice; and should be managed as effectively as any other profit making organisation.

In a nut shell, the main benefits of implementing a simple, practical QMS in such a practice would be:

- To provide an orderly and more effective management environment for engineering activities to proceed productively and therefore profitably. For example, the benefits could be in the form of assurance that:
- Projects would be planned and executed in a more consistent and effective manner to reduce errors, delays, loss of productive time and unnecessary claims.
- Records would be more informative and readily accessible when required for reference or to provide evidence of effective management.



Bob Bruneau

- To enhance the reputation of the firm by providing a proven image of reliability and security to clients. This would result in acquiring a competitive edge when tendering and negotiating contracts. Accredited certification to the international ISO 9001 standard is an example.
- To obtain possible advantages in negotiating for professional insurance

The "pain" of implementing a QMS is not as severe as many engineers believe. Project management is already an accepted and generally well practiced major element of QMS. However, more emphasis is needed on company-wide administrative processes and on the measurement of quality and productivity to provide opportunities for improvement.

By Dr Michael Carruthers

Customers approach a consulting engineering organisation for various reasons, but usually because they are not intellectually equipped to handle a particular contract (or part thereof) or a situation.

The main reason for doing so is because they require an outcome of the desired quality at the end of the day. It is reasonable to state that the achievement of a quality result is one of the main driving factors justifying the use of Consulting Engineers.

The multi-disciplinary, tight schedule, tight budget, simultaneous project situations faced by most consulting engineers, makes the sole reliance on professionalism only, very risky for both the consultant and the customer alike.

It is for this reason that many large customers including the national and provincial governments insist that the consulting engineers that they use, should have an independently certified ISO 9001 quality system in their organisation.

The systematic disciplined approach that the five key pillars of this system require, give both customers and users alike the confidence of a successful outcome every time.



Michael Carruthers

The five key pillars are:

- \* The formalisation of the Quality Management System
- \* A clear understanding of and commitment to management's responsibility for achieving quality
- \* The correct and optimal management of resources
- \* Planned and designed product/service realisation
- \* Measurement analysis and improvement of the results obtained and system used.

The broad approach of this system requires that the ISO 9000 series be written in generic format which needs to be customised for each field.

It is for this reason that the SAACE has acquired professional quality skills to generically customise this system for consulting engineering organisations that employ less than 20 persons.

This will enable them to customise and install such a system in an affordable manner, and thus open up wider contract horizons for its smaller members.

## FIRMS COMMENT ON IMPLEMENTING A QMS

There are currently a number of member firms with ISO 9001 certification and the Association encourages its many member firms to achieve accreditation. As a show of support, the Association itself achieved ISO 9001 certification during 2004.

Says Johan van Rensburg, management representative for quality for L.C. Consulting: "L.C. Consulting received ISO 9001 accreditation in 1995 and was the first consulting engineering firm in South Africa to achieve this.

"From the beginning, our philosophy on Quality Management was that ISO accreditation does

not automatically result in improved quality. The key to a successful quality management programme is a total focus on client satisfaction as well as making quality part of the daily operations of the company.

"Quality must be transformed into "The Way we do Things" in the organisation. It involves commitment from senior management through to each and every employee."

The quality management system implemented by BIGEN Africa was audited in November 2004 by the Internationally Recognised Body - (NQA) National Quality Assurance and

was recommended for certification. BIGEN Africa is now certified in compliance with the international standard ISO 9001:2000.

Says Leon Erasmus, from Business Development Engineering, which assisted BIGEN Africa in successfully obtaining ISO certification summarises the process as follows: "It is important to note that the motivation to get ISO certified should not be seen as a once off process. ISO is a standard. The process of business analysis and continuous improvement is one that should never stop. Standards act as mere baselines or founda-

tions for a continued strive to business excellence."

Although BIGEN Africa is not one of the first engineering consultancies to receive the certification it in no way means that the company did not view quality management in a serious light.

CEO Francois Swart explains BIGEN Africa's approach: "We took our time in ensuring that all internal processes were in perfect order before attempting certification. After 6 months of hard work we were proud to announce that we passed the certification with flying colours."



Message from Graham's desk



# HOW TO HANDLE REPEAT TENDERS

This is a growing problem which is debilitating to our industry and saps time and resources. It has grown to such a degree that the Association feels that it has become necessary to produce a client information sheet detailing how the issuing of repeat tenders affects our industry and what our recommendations to members are in order to curb this practice.

What do I mean by Repeat Tendering? It is when a client, without satisfactory reasons, calls for a proposal, whether priced or un-priced, for the same or substantially the same project for which proposals have previously been submitted to the same body within the previous six months.

The Association believes that the prevalence of this practice is caused by clients who call for proposals, with no intention of proceeding, but merely with the

intention of testing the market and establishing their budgets and obtaining rates. This is exacerbated by the fact that the same clients will often take a shotgun approach and call for tenders from a large number of consulting firms rather than taking a more focused approach with a well-defined and transparent process of adjudication.

As a result, many firms respond with detailed priced proposals before the tender is cancelled resulting in completely unproductive time for firms. The financial consequences to the industry as a whole is undoubtedly substantial, not to mention the cost of time and capacity to individual firms - and this in an industry which can already be described as a high risk, low return sector.

We intend to make it clear to clients that the preparation of these tender proposals takes con-

siderable time, money and effort and that our member firms cannot do this ad infinitum without experiencing severe financial hardship.

The onus is on our member firms to assist in curbing this practice and the Association has accordingly detailed in its Code of Conduct what it considers to be an appropriate way in which to handle Repeat Tenders.

In section 2.7 of the Code of Conduct it says that firms must "inform the Association of instances, of which it becomes aware, of a client body putting out a call for proposals for a project within six months of a previous call for the same or substantially the same project."

Having been informed of the Repeat Tender, the Association will engage with the client to determine whether or not satisfactory reasons exist for the calling of the tender again within a

six month period.

Should it be found that there exists no plausible reason or that the call for tenders was frivolous or without good intention, the Association will call on its member firms to refrain from responding to the request for tenders.

It is only by not responding to these cases that we, as an industry, will have any opportunity to curb this practice before it becomes completely untenable.

The Federation of Civil Engineering Contractors (SAFCEC) has a similar provision for handling such instances.

For more information contact Graham Pirie, CEO, on (011) 463-2022.

**Francois Swart of BIGEN Africa heads up the Procurement Task Team which is currently addressing this issue. Refer back to Inside Track November 2004 for more information.**

## Editor's note

Dear readers,

Thank you, we have received some lovely compliments about last year's editions of Inside Track. We are pleased that it is hitting the mark in terms of what you would like to read.

We kick off 2005 with a brand new president whom we hope will lead the Association and its members through a period of intense change with sensitivity and a woman's perspective.

I have heard often of 2005 being referred to as "2000 and Thrive" and indeed there is a positivity from most people that it will be a good year for us all.

In this edition, we feature two viewpoints of Quality Management Systems from two key roleplayers in the quality game - Bob Bruneau and Michael Carruthers. In addition, we include comments from some firms which have already implemented QMS. We do hope that the process of implementing a QMS does not seem as daunting as before and that those small firms seeking advice will liaise with the Association, which, in achieving certification, has already done a lot of ground work in interpreting ISO 9001 for a service organisation.

Enjoy!

Lorraine Robertson-Tarr  
Editor  
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## CALENDER OF EVENTS

Date	Event	Venue
1 March	Western Cape Presidential Visit	TBC
2 March	Workshop "How much does your business cost?"	TBC
3-5 March	CIETS EPWP NQF 7	Bloemfontein
4 March	LITEworks 3d Train the practitioner NQF 5&7	Nelspruit
7 March	LITEworks 3d Train the practitioner NQF 5&7	Bloemfontein
8-9 March	Free State/ Northern Cape Presidential Visit	TBC
14-18 March	GAMA Conference	Kampala, Uganda
14-16 March	CIETS EPWP NQF 5	Jhb Bedfordview
Mid March	Occupational Health and Safety Regulations	TBC
17-19 March	CIETS EPWP NQF 7	Jhb Bedfordview
6-7 April	KwaZulu-Natal Presidential Visit	TBC
18-20 April	CIETS NQF 5	Nelspruit
20-21 April	The Construction Charter Indaba -Carole (011) 883 7936	-
21-23 April	CIETS NQF 7	Nelspruit
9-11 May	CIETS NQF 5	Cape Town
10 May	Gauteng North Presidential Visit	TBC
11 May	Gauteng South Presidential Visit	TBC
12-14 May	CIETS NQF 7	Cape Town
18-20 May	SAPOA Conference	
21-24 June	Eastern Cape, Border Kei, Southern Cape Presidential Visits	TBC
20-22 July	Limpopo and Mpumalanga Presidential Visits	TBC
4-5 August	North West Presidential Visit	TBC
23 August	SAACE Glenrand Excellence Awards	Sandton Sun
2-8 September	FIDIC Conference	Beijing, China
9-11 October	Construction Convention	Sun City
18-21 October	IMESA Conference	

\*School of Consulting Engineering - for more information call Johan van Schalkwyk (011) 463-2022 # Please note date changed since last issue!