



INSTITUTE OF MUNICIPAL
ENGINEERING OF SOUTHERN AFRICA



2012

PRESIDENTIAL ADDRESS



CONFERENCE THEME AND VENUE

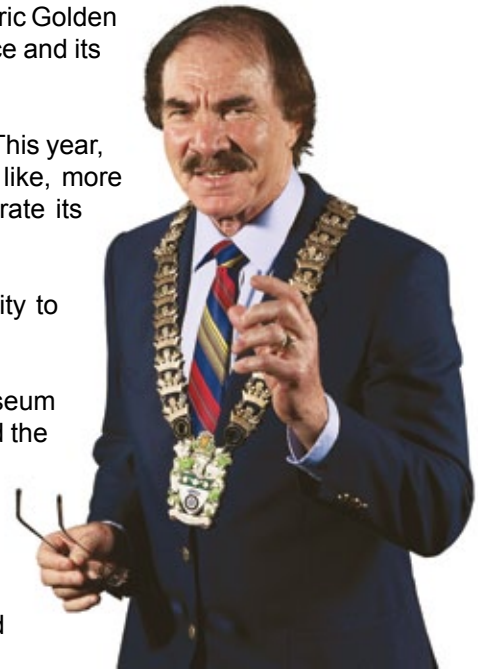
This year marks our 76th Annual Conference — the first since last year's historic Golden Jubilee in Johannesburg, where we celebrated 50 years of IMESA's existence and its significant contribution to municipal engineering in Southern Africa.

The theme of last year's conference was "Yesterday, Today and Tomorrow". This year, it is very fitting that we look to the next fifty years. What will IMESA look like, more importantly what should it look like in 2061, when IMESA members celebrate its centenary?

Our theme this year of "**Engineering For Change**" gives us an opportunity to look towards — and to actively shape — the future of IMESA.

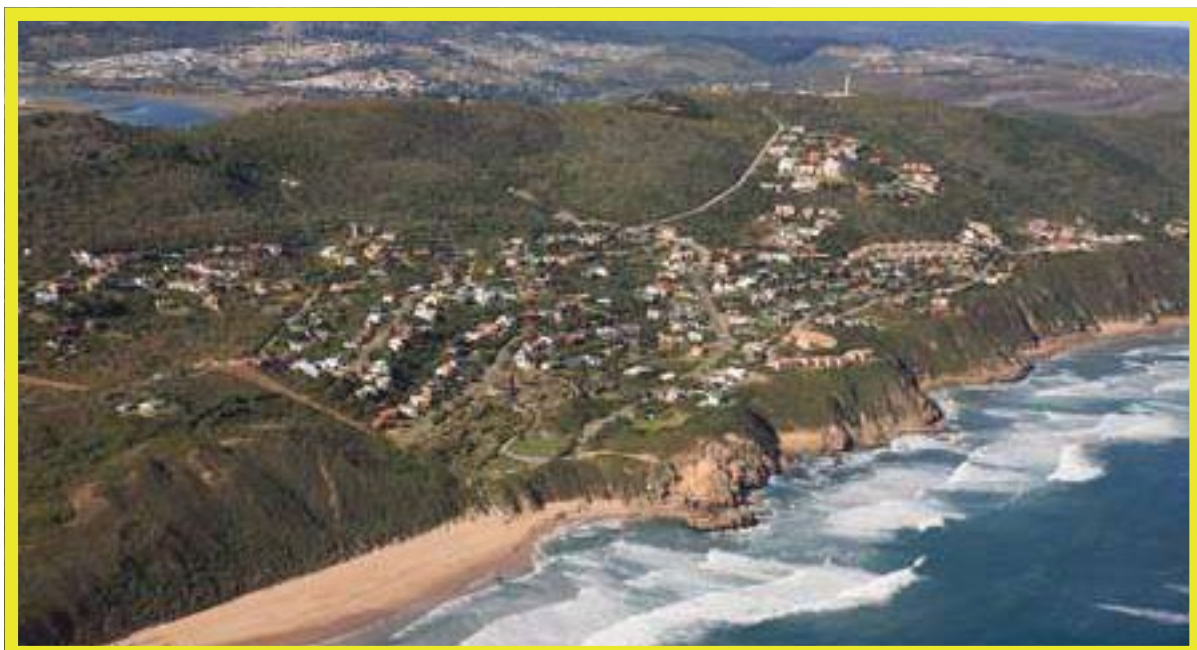
The decision to choose George as our host city, and the beautiful Railway Museum as our venue, represents in many ways a symbolic link between the past and the future. George is the sixth oldest city in South Africa.

Its origins can be traced back to the arrival of the Dutch East India Company on the shores of the Cape of Good Hope. Timber was a major commodity for both trading and building in the era of sailing ships. The astute Dutch colonisers recognised the economic value of the forests around George and so established a timber outpost here in 1776.



An examination of historical records demonstrates that from an early stage in George's history, engineering played an important role. The building of a railroad, as well as the road infrastructure that would connect George to other cities, involved backbreaking labour (some of it done by convicts). The same applied to the construction of a number of passes through the mountains (for example the Montagu Pass), some of which were, quite literally, blasted through rock. These feats of engineering and construction created not only the communications infrastructure for business, but also opened the way for the tourist industry to flourish. More than a century later, we can applaud the foresight of those early engineers. Today, the Garden Route is widely regarded as one of the most scenic routes in South Africa and George has become an important hub for commerce and tourism.

The selection of the beautiful Outeniqua Railway Museum as our conference venue for 2012 is therefore a most appropriate reminder of past technological history and of the progress and development that engineering have brought to the city of George. On behalf of IMESA, I would like to offer my sincere appreciation and thanks to the Southern Cape and Karoo branch of IMESA and to all the staff at Head Office for their sterling work in arranging this year's IMESA conference. Congratulations on a job well done.



HIGHLIGHTS OF THE 2011 JUBILEE CONFERENCE

Our Jubilee Year in 2011 was a very significant one. It marked the passage of 50 years of IMESA's history and development as an organisation after its inauguration in May 1961, which was founded on the fifty-six years prior history of the Institution of Municipal Engineers: African District. This history was highlighted at our 2011 Conference, held at Birchwood Hotel & OR Tambo Conference Centre in Johannesburg and the Conference was a great success.

We were delighted to welcome some of our past presidents and their spouses, at the cocktail function on the Tuesday evening.



We also welcomed a delegation from the International Federation of Municipal Engineering (IFME), an organisation that IMESA has established a close and collegial working relationship with over recent years. The IFME Board Meeting was deliberately timed to coincide with the conference and it was wonderful to have IFME members with us for the Jubilee celebrations.



IFME and IMESA Presidents

A particular highlight of the 2011 conference was the launch of Reflections 2011, Professor Johannes Haarhof's history of IMESA. The title of the book, Reflections, was particularly appropriate for the theme of the Jubilee Conference – "Yesterday, today and tomorrow". In addition to providing detailed information on IMESA through the decades, the book contains fascinating insights into the historical origins of municipal engineering in 19th century England, as well as micro biographies of eminent municipal engineers, extracts from the addresses of past IMESA Presidents and photographs from the archives. Since the conference, Professor Haarhof's book has continued its successful run. For those of you who have not yet purchased one, I thoroughly recommend investing in a copy.



Prof. Haarhof



IMESA HAPPENINGS AND ACHIEVEMENTS OVER THE PAST YEAR

I would like to briefly highlight some of the major happenings and achievements of IMESA over the past year.

IFME World Congress, June 2012

In June 2012, Johan Basson, Kobus du Plessis and I were privileged to attend the IFME World Congress, which was held in Helsinki, Tallinn and Stockholm. The conference theme was "Sustainable Communities" and Roger Byrne and I were asked to present a keynote paper on "The Implementation of Sustainable Infrastructure Asset Management (SIAM) as Part of a National Programme". Roger and I were also part of a panel that was appointed to discuss the main theme. The main global threats to sustainability were identified as debt; population growth; an ageing population; climate change; limited resources and changing technology. The conference concluded with a technical tour of Stockholm, where many major works are planned. I was particularly impressed with by the Stockholm Inner City Renewal Project, which for me prompted inevitable comparisons with urban renewal programmes in South Africa and the effectiveness of our own Urban Renewal Tax Incentive.



Training courses

One of the major benefits of having a new Head Office is that for the first time, IMESA has a dedicated training venue. By November 2010, our training initiatives had proved so successful that it was clear that we needed a modern and well-equipped training venue as a matter of urgency. This need is met through our state of the art training facilities at IMESA House.

This year, in response to demand, we have successfully developed six new Infrastructure Asset Management courses. Two hundred and eighty five delegates have already been trained on these courses. We have also trained forty eight delegates in Project Management.

Over the last two years, training has taken place in Windhoek, Port Elizabeth, Cape town, Bloemfontein, Ermelo, Nelspruit, Johannesburg and Durban. Our Head Office training venue has also been hired by outside companies.

In addition to facilitated training courses, an agreement has been reached for IMESA to offer the AMPLE range of web-based training courses. This will enable us to extend our training and skills development to a wider range of stakeholders.

IMESA Infrastructure Management System (IIMS)

Probably the greatest challenge facing municipalities in South Africa is that of asset management: the effective and methodical recording of all accumulated assets with a view to managing them today and maintaining them for the future in the most cost-effective manner possible. With this in mind, IMESA has developed an innovative and comprehensive asset management methodology that will not only help municipalities to ensure GRAP17 compliance by capturing the data required to generate GRAP17 registers, but to apply this information to improving long-term municipal asset management and maintenance planning. The ultimate goal, of course, is to enable municipalities to use this new-found knowledge to provide improved service delivery to their communities.

IMESA believes that the computerised system is very accessible to the user and uncomplicated in terms of its general implementation; it is thus ideal for use across all municipalities.

Municipalities will have at their fingertips standardised records of the condition of their infrastructure, enabling them to determine on an on-going basis the impairment and maintenance needs of their infrastructure, thus providing opportunities for informed planning.

The IIMS project has been successfully rolled out to many municipalities in the Free State under a memorandum of agreement with CoGTA and National Treasury. We will be extending the project to other regions this year.

Membership

Membership numbers are always a good indicator of growth. In the 2011/12 subscription year, more than one hundred members were admitted, an increase of approximately 10%. In the last three months, forty new applications have been received, which is an encouraging indication of a growing interest in IMESA and what it stands for.

Website

Our IMESA website is being developed continuously and regular additions are made. A particularly important component is the knowledge base section. This acts as a repository for documents on a wide array of information relating to Municipal Engineering. This section is still in its infancy, however. If we are to achieve our full potential as the national representative body for municipal engineering, the knowledge base will require consistent effort, for the benefit of all. It is important to remember too that the provision of current, usable information relating to municipal engineering and governance is a direct means of improving skills in local municipalities. We need IMESA members to contribute to this resource base regularly, so that information remains current and relevant.

Professional Affiliate Memberships 2011/12

I have actively pursued partnerships and strategic alliances in order to contribute and develop new initiatives for national priorities. Through Professional Affiliate membership, IMESA aims to build beneficial relationships with other professional bodies and associations. This facilitates shared access to resources and knowledge across a broad spectrum of engineering disciplines.

Current Professional Affiliate members include:

- Corrosion Institute of South Africa (CORRISA)
- South African Local Government Association (SALGA)
- Southern African Bitumen Association (SABITA)
- South African Road Federation (SARF)
- Southern African Society for Trenchless Technology (SASTT)
- Water Institute of South Africa (WISA)

We have also recently signed a Memorandum of Agreement with MISA (Municipal Infrastructure Support Agency), established by COGTA to deploy technical experts in order to assist rural municipalities with planning.

Global NAMS Committee membership

During 2012, IMESA became a member of the Global NAMS Committee. The Chairman is Chris Champion from Australia. Three meetings have been held, in Canberra, Helsinki and Los Angeles.

Bursaries

The IMESA bursary was again made available during the 2011 Jubilee year. Of the ten bursaries available, only six were taken up, however. After reviewing reasons for this decline, IMESA made the decision to revise the criteria for awarding bursaries. The funds available were also increased, in order to ensure that opportunities to study for an engineering qualification remain relevant and attractive.

Official opening of IMESA House, July 2012

In July, we officially opened our new head Office in Westville, outside Durban. IMESA now has a base, a home, and a focus point from which it can grow and develop into the future. However, this new home would be simply a building without the tireless commitment down the years of a large group of individuals. When IMESA was first established following its inaugural meeting on May 1, 1961, there was no physical “head office” – in fact, there wasn’t even a dedicated staff complement! Up till 2006 all administration was handled at branch level with a Secretary/Treasurer, Frik Bosman, overseeing all national requirements. I would like, therefore, to acknowledge and salute our Past Presidents; our present and past Councils and EXCOs; Frik Bosman and our present and past regional leadership for their contributions: the new Head Office is in many respects a testament to your work over the past fifty years.



ENGINEERING FOR CHANGE

Turning now to the theme of this year's conference: ***“Engineering for Change”***.

The Challenges Facing Municipalities And Municipal Engineers In South Africa

We are all aware of the multiple challenges that currently face municipalities and municipal engineers in South Africa. Our efforts are bedevilled by corruption, tenderpreneurship, fraud, financial mismanagement, difficulties with job creation and skills shortages. The Diagnostic Report which was recently produced by the National Planning Commission (NPC) highlighted no fewer than nine major areas of concern and the *“triple challenge of unemployment, poverty and inequality.”*

South Africa is also hamstrung by the world economic slowdown; the knock on effects on local industries; job losses due to the closure of local businesses and a slow rate of job creation.

Greg Mills, author of the provocative book *Why Africa is Poor: and What Africans can Do About It* (Penguin SA, 2010) asks why good development examples abound in East Asia, other parts of Asia and in Central America, but not in Africa. Why has Africa failed to realise its potential in half a century of independence? In searching for his answer, Mills looks at countries across the continent and at the developing world. He concludes that the main reason why Africa's people are poor is because their leaders have actively made this choice. This is demonstrated by the ongoing lack of investment on the part of African governments in people and technology; the inability (or refusal) to allow the private sector to function efficiently by reducing legislation.

Where to from here? As municipal engineers, how do we contribute towards building a bridge across the chasm of difficulties, so that South Africa can achieve the desired future articulated in the NPC's *National Vision Development Plan 2030*? We need to be frank about the challenges that lie ahead. The majority of South Africans remain poor and unskilled.



The Municipal Engineer of the Future

Trevor Manuel, Head of the NPC and President Zuma, in his State of the Nation address, both called on us as South Africans to do two things: firstly, to offer our efforts, time and skills as individuals and citizens of our country; secondly — and this is a message that comes particularly from Trevor Manuel — to realise that in order to solve our problems, we need to do things differently.

It is always tempting to believe that throwing more money at a problem will solve it. However, as Mills points out, “Money is never the key problem – governance, government capacity, skills, and the right policy set are more important” (p. 155). The implication for municipal engineers in South Africa is that we need to change from being “engineers with technical skills” to becoming “engineers for change.” As municipal engineers, we have the privilege of being able to improve the lives and wellbeing of all South Africans, particularly the most vulnerable in society: the poorest of the poor and the children – our citizens of tomorrow.

Perhaps part of the answer lies in not focusing solely on the “big picture”. Someone once asked the question: “How do you eat an elephant?” The memorable answer? “One bite at a time!” Trying to simultaneously tackle all the problems facing South Africa would dampen the spirits of even the most optimistic municipal engineer. Focus instead on the problems of the municipality or municipalities in which you live or work. Contribute towards fixing one municipality at a time, one problem at a time. Waiting for policy statements or strategies from National Government will achieve nothing, as no government has all the answers. Put very simply, we all need to follow the brand advice given by the NIKE sportswear company: “Just Do It”. Greg Mills offers solutions for sub-Saharan Africa by looking at how Vietnam and Morocco achieved their economic successes. Dealing with Vietnam first, Mills (p77) identifies three primary drivers for its economic success. Like Singapore, Vietnam (i) focused its attention of raising the living standards of its entire population; (ii) gave equal attention to both the formulation and the implementation of its liberated economic policy and (iii) placed the focus of its new economic policy on providing structural support for the needs of its private sector. Both governments worked very hard to offer direct state support in order to underpin the development of private enterprise.

From 1986 onwards, Vietnam placed particular emphasis on kick-starting their “Doi Moi” liberated economic policy through granting greater freedom, initially to the agricultural sector. One strategy was to allow farmers to keep a portion of their crop yield (p 76), based on the idea that the agricultural sector would be uplifted through encouraging farmers to begin producing food for export. The net result was to move Vietnam from being an importer of rice (2 million tons in 1980) to being an exporter of over 7 million tons in 2008 - second only to Thailand in rice production. This policy of structural state support for business development was broadened over time to include a multiplicity of different private enterprises.

As IMESA members, we have an important leadership role to play. We can contribute towards positive change in South Africa by changing our own mindset, from one of “we are engineers” to a more significant “we are agents who engineer change” or perhaps even “we are mentors who support municipalities in engineering their own change.” In sharing knowledge, we improve skills. In improving skills, we enhance the running of our municipalities. In developing the capacity and effectiveness of one municipality at a time, we can transform the lives of many. In July, the new Minister of Public Works, Thembelani Nxesi, called for trained and technically skilled people to join the Public Works programme, particularly to mentor and develop upcoming trainees in the field. IMESA members have the potential to make a significant contribution towards this initiative and I encourage all of you to get involved where you can.



Municipal engineering, at one time the career of choice for many engineers, has changed. The Municipal Engineer will have to change in order to meet future challenges. New skills have to be developed in environmental studies; local authority finance; negotiating; infrastructure management; carbon reduction; the optimum use of precious resources; renewable energy and sea-level rise. These are exciting areas for the Municipal Engineer to grow into and are seen by some as being essential to the future well-being of municipal engineering.

While traditional technical skills are vital for the Municipal Engineer, the key issue going forward is the development of non-technical and interpersonal skills. These abilities are measured by communities and are seen as an important indicator of the engineer’s worth.

Farewell

In closing, I must offer a personal farewell to you all, as my tenure as IMESA's President is now drawing to a close. I have had the privilege of serving IMESA as President for the past two years and would like to offer my sincere thanks for this opportunity. In particular, I would like to pay tribute to the IMESA Council members, to EXCO and to the staff at the Durban Head Office. Last but not least, next to God, my special thanks go to my wife Penny, for her unstinting support during my time in office.

I am confident that I leave IMESA in good hands, that we are financially sound and that I hand the baton over to a President who will confidently and ably take IMESA into the future. Frank Stevens holds a B.Sc in Civil Engineering from the University of Natal, Durban. He is a Fellow Member of the IMESA and South African Institute of Civil Engineers. A professional civil engineer by training, he has 8 years experience with Campbell, Bernstein and Irving; 2 years experience with Murray and Roberts and 26 years of municipal experience. This includes time spent as the Town Engineer of the Borough of Pinetown; as the Director of Technical Services at the Port Natal Ebhodwe Joint Services Board and as Deputy Head (Technical support) for eThekweni Water and Sanitation.



Frank Stevens

My association with IMESA has lasted for twenty one years, culminating in my term as President. It is now time to start a new chapter. A lot has been achieved over the last two years. I hope to offer my support to IMESA for many years to come and look forward to joining you all in "engineering positive change" in this wonderful country of ours.

Thank you.



Thanks To Our Sponsors

An event like this would not be possible without the support of our sponsors. On behalf of IMESA, I would like to express our sincere thanks to our Platinum Sponsor (PPC Cement); our Gold Sponsors (aurecon; Royal HaskoningDHV; Vela VKE; Worley Parsons); our Silver Sponsors (DPI Plastics; Osborn; PDNA) and our Bronze Sponsors (BKS; Colas; Southern Mapping and srk consulting).